



ENG 2025 Survey: Shaping the Future of the Materiel Group ENG Community

National Defence

Final Report

March 2021

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**ENG 2025 Community Survey: Shaping the Future of the Materiel Group ENG Community
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This public opinion research report presents the results of an online survey conducted by Quorus Consulting Group on behalf of National Defence. The research entailed a total of 261 online surveys with members of the DND ENG community. The research was conducted between November 26 and December 21, 2020.

Cette publication est aussi disponible en français sous le titre : Sondage dans le cadre de l'initiative ENG 2025 : Façonner l'avenir de la communauté ENG du Groupe des matériels

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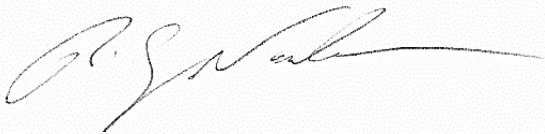


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Signed:

A handwritten signature in black ink, appearing to read "Rick Nadeau", is written over a light gray, textured rectangular background.

Rick Nadeau, President
Quorus Consulting Group Inc.

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Executive Summary

Background and Research Objectives¹

The Material Group employs approximately 800 engineers who perform a wide range of roles in Capital Acquisition, In-Service Equipment Management, and Technical Specialties. The Materiel Group Engineering (ENG) community supports the Materiel Group priority of building and sustaining a professional Engineering community workforce. In response to the new Defence Policy: *Strong, Secure, Engaged* (SSE), the ENG Advisory Committee created ENG 2025, with the ultimate goal of reviewing the state of the engineering community in Defence. The aim of the ENG 2025 Initiative is to provide the tools and opportunities that will allow the ENG community to reach its full potential¹¹.

ENG 2025 is now interested in attitudes of members of this occupation towards potential new initiatives. The committee is also interested in understanding the perspectives and experiences of diverse groups within the ENG occupation, including employment equity groups (i.e., women, visible minorities, persons with disabilities, Indigenous peoples) and a variety of ENG specializations (i.e., mechanical, electrical, aerospace, marine, etc.).

The findings from this survey will be used by the ADM(Mat) and the ENG 2025 Main Committee to inform changes to the engineering career, including recruitment efforts, training opportunities, mentoring programs, and talent management.

Methodology

The database of roughly 750 eligible survey candidates were invited to participate through an email survey invitation sent out by the ENG 2025 committee. The committee took measures to ensure maximum response rates, which consisted of a unique link sent to each member of the ENG group via email, followed by two follow-up reminders.

The research resulted in 261 completed surveys, a participation rate of 35%. Given this response rate, the distribution of this survey will not necessarily reflect the distribution of the civilian engineers who work for ADM(Mat).

The survey instrument used in the online survey had an average completion time of 20-25 minutes and consisted of both closed and open-ended questions. Data collection for the online survey took place from November 26th to December 21st, 2020.

¹ Wording for this section was adapted from the Statement of Work issued by DND: Department of National Defence, (2019), *ADM(MATERIEL) ENGINEER (ENG) 2025 SURVEY STATEMENT OF WORK*, pp. 1-2.

¹¹ (ADM[MAT], 2018). Statement of Work for *ADM(MATERIEL) ENGINEER (ENG) 2025*, Ottawa, ON.

Due to the non-probability sampling from a list of ENG community members, a valid margin of error could not be calculated. Results were cross-tabulated based on an analysis plan previously discussed with and approved by the Project Authority and the ENG group point of contact.

Research Findings

1. Peer Support and Mentorship

Career Support and Coaching

When asked to provide the informal ways in which their supervisors have provided support to help improve job performance during the past year, nearly 3 in 5 engineers received feedback and support to enhance their experience in their current role (57%) and support to improve their ability to contribute to the team (56%). More than half received support to improve their overall performance (51%) and were guided to relevant training to improve their skills (51%).

In terms of new ways to provide support, nearly 2 in 3 engineers (62%) were extremely or somewhat interested in receiving job performance coaching from their supervisor, and 58% in receiving career development coaching from their supervisor.

Formal Mentorship Resources

Another way of support explored included formal mentorship resources. Over 6 in 10 (62%) engineers were extremely or somewhat interested in receiving formal mentorship for their career development.

Regarding existing resources, 63% of engineers were aware that there are formal mentorship resources available to assist in career development. Slightly more than 1 in 10 engineers (14%) were aware and have made use of formal mentorship resources available to assist in career development, while 49% were aware but have not made use of formal mentorship resources. The remaining 37% were unaware of these resources.

Over 7 in 10 (73%) respondents who were aware and have used formal mentorship resources say that these resources had a positive impact on their career in the Materiel Group.

Respondents who were aware but had not used formal mentorship resources for their career development cited a lack of available time as the main reason for not using these resources (41%). In general, 36% had not even considered using formal mentorship resources or felt that they had no need for them.

2. Professional/Career Development

Career Development Priorities

Regarding career development priorities, respondents rated a variety of areas in terms of how important they are to their professional/career development in the Materiel Group over the next 12 months. Overall, most of the highest priority items (very high or somewhat of a priority) were related to the honing and development of specific skills, mainly: honing of communications skills (67%), honing leadership skills (62%), developing new technical skills (60%), and honing of technical skills (60%).

Among engineers who indicated that honing communication skills was a priority, the most common mentions included written/technical communications (17%), presentations/briefings (16%), and communications with key personnel (14%).

Among engineers who indicated that honing leadership skills was a priority, the most common skills related to broad elements such as effective management (22%), effective leadership (13%), engagement (9%), and communication (9%).

Among respondents indicating that honing or developing new technical skills was a priority, the most common technical skills mentioned related to broad skills across engineering domains. More than 1 in 10 (12%) were focused on developing project management, and roughly 1 in 10 focused on software/training programs (10%), general technical skills (9%) and systems engineering fundamentals (8%).

Access to Career Development Training

Respondents were asked to rate the opportunities they have to access a list of available resources and types of training to assist in professional/career development within the Materiel Group.

More than 1 in 2 engineers rated access to resources and training for project management (55%), and Government specific training (52%) as excellent or very good, while the lateral pool also received relatively positive ratings (48%).

Relationship Between Priorities and Access

To evaluate the extent to which priorities of engineers in the Materiel group are being met, the relationship between the priorities for their career development and the access to resources and training for this purpose was calculated using the top-two values from the questions addressing these perceptions. The larger the gap between priorities and access to training, the larger the issue for career development.

The areas that showed the largest gaps included honing of communication skills (48 percent-point gap), opportunities for innovation and creative thinking (42 percent-point gap), honing of leadership skills (37 percent-point gap), developing new technical skills (35 percent-point gap), and honing of technical skills (34 percent-point gap).

Lateral Deployment Pool Participation

Nearly 1 in 2 respondents (45%) reported that they had joined the lateral deployment pool while working in the Materiel Group.

Nearly 9 in 10 participants who joined the lateral deployment pool (87%) described exposure to many other opportunities as the main benefit of having access to the pool. Other benefits identified include the ease and reduced stress of the process compared to the traditional competitive process (67%), and the exposure of their credentials to hiring managers (47%).

There is some degree of satisfaction with the lateral deployment pools since 25% of respondents did not see a need for any changes in the lateral deployment pools over the next 5 years. Another 39% were unsure of how the pools could improve for the future. Among the few suggestions proposed, it was suggested that all assignments, levels and people be listed in the pool (5%), and that potential for growth and assistance with career progression and management be identified in the pool (4%).

Second Language Training

Nearly 2 in 3 respondents (64%) considered their second official language to be French, while 31% described their second official language to be English.

Nearly 2 in 3 respondents (64%) believe they could benefit from some French-language training when describing their level of comfort using French at work. Nearly 1 in 3 respondents (31%) feel they are comfortable using both English and French at work, and therefore do not require language training at work.

Over a quarter of respondents (27%) described having a second language profile of BBB level or higher. Over 1 in 3 respondents specified that their second language profile is below a BBB level (36%), and an additional 36% are currently without a second language profile.

The most common activity undertaken at work for improving the ability to communicate in their second language was to speak with colleagues in their second language whenever possible (15%). However, nearly half of respondents (49%) specified that they do nothing in particular while at work to improve their ability to communicate in their second language.

Common activities undertaken outside of work to improve second language proficiency included reading (15%), watching video content (e.g. TV, movies, podcasts, etc.) (12%), communicating with family members (12%), and listening to the radio (10%). Nearly half (47%) specified that they do nothing in particular outside of work to improve their ability to communicate in their second language.

Key Leadership Competencies Course Participation

Nearly one third of engineers (31%) took the Introduction to Treasury Board KLC course offered in a boardroom from September 2019 to February 2020. More than 1 in 10 respondents (13%) have taken the Introduction to Treasury Board KLC course offered online since June 2020, and 8% have taken the Advanced course on Treasury Board Key Leadership Competencies. Over half of respondents (56%) specified that they have not taken any of the KLC courses.

More than half of respondents who had taken at least one of the Introduction to Treasury Board KLC courses (53%) finished all or most of the Self-Assessment, with 36% completing it entirely.

Key Leadership Competencies Course Feedback

Two thirds of advanced course participants (66%) felt that the course was very or somewhat useful to prepare them for competitions. The equivalent proportion among those who took the Introduction to Treasury Board KLC course via video conference was 66%, and 59% among those who took the in-person boardroom session (59%).

More than 1 in 2 advanced course participants (52%) felt that the content was useful in their daily work. This figure was 37% among those who took the latest iteration of the Introduction KLC course hosted via video conference and 28% among those who took the Introduction course hosted in an in-person boardroom setting.

Suggestions to improve the KLC courses included posting sets of practice questions in order to prepare for testing (24%), an increased frequency in conducting KLC courses (20%), and that sessions be made available focusing exclusively on the interview scenario (19%).

Training Opportunities for Career Development

Nearly half of respondents (49%) strongly or moderately agreed that the current training opportunities available through DND fully cover their needs for career development.

3. Post-Grad Education Support

Over 2 in 5 respondents (43%) have considered completing a Post Graduate degree while working in the Materiel Group. One in two respondents (50%) were extremely or somewhat interested in the prospect of post-grad programs developed through DND targeting highly technical expertise.

Respondents were focused on system-based technologies such as artificial intelligence (49%), autonomous systems (44%) and cyber security (39%). Other popular topics included robotics (32%), 3D printing (26%), wearable devices (21%), and nanotechnologies (20%).

Nearly 3 in 5 respondents would be prepared to accept a full-time, fully-funded scenario for pursuing a post-grad education (57%), and 54% would be open to a part time approach that was fully funded by DND while continuing to work. Nearly 9 in 10 respondents who selected at least one potential funding option (88%) would accept working in the Materiel Group for twice the number of months or years as it took them to complete the program in exchange for funding of a post-grad education while working in the Materiel Group.

4. Promotion Opportunities

Staffing Process History

One third of respondents (34%) have applied once to an ENG-05 / ENG-06 staffing process, while 25% have applied twice, and 11% have applied 3 times. Conversely, nearly 1 in 4 respondents (23%) have never applied to this staffing process.

Among respondents having previously applied to an ENG-05 / ENG-06 staffing process, 46% have passed the staffing process once, 13% have passed twice, and 6% have passed three or more times, while 32% have never passed. Nearly 2 in 3 successful applicants (64%) were promoted or selected for a position once in the Materiel Group, whereas 24% have never been promoted or selected.

Recent Staffing Process Application

When preparing for an ENG-05 / ENG-06 staffing process written exam, half of all previous applicants indicated that they spent 10 hours or less, 18% prepared for 10 to 20 hours and 26% indicated preparing for over 20 hours. The average across all respondents was 15 hours.

When preparing for an ENG-05 / ENG-06 staffing process interview, nearly two-thirds prepared for 10 hours or less (64%). The average across all respondents was 10 hours.

Over 3 in 4 previously successful applicants (76%) passed their latest application to the ENG-05 / ENG-06 staffing process. More than 1 in 5 successful applicants attributed their success mainly to their preparations and practice of interviews or sample questions (21%), while 20% attributed their success to their level of experience, and 10% attributed their success to the KLC course and studying the course material.

Staffing Process Feedback

Respondents were asked to specify their level of satisfaction with different aspects of the ENG staffing process in the Materiel Group. Two in five respondents (40%) were extremely or somewhat satisfied with the information that was sent about staffing processes once the poster was released, 33% with the information sent about staffing processes before the poster was released, 31% with the information that is sent about staffing processes during the entire assessment process and 30% with the fairness of the staffing process in the Materiel Group.

The most common suggestion for information to provide during the staffing process was information that clearly outlines the selection criteria and requirements for the staffing process (11%). Suggestions for additional activities to better prepare for an ENG staffing process written exam and interview included providing examples of questions and practice material to better prepare (12%), and more courses and coaching to generally assist with preparations (11%).

In terms of the collective staffing process approaches, 65% of respondents ranked promotions done on a continuous basis as the most appealing approach, followed by processes running every 2 years (26%), and renewing every 5 years (8%).

Staffing Process Improvements

Nearly 1 in 3 respondents (30%) applied for the latest ENG-05 staffing process. Suggestions to improve the MMSE 840 exercise as part of the ENG-05 staffing process included providing feedback after completing the test to be able to learn from their mistakes (59%), and providing guidance on how to prepare for the test (48%).

In terms of general improvements to the written exam, nearly 1 in 10 applicants to the latest ENG-05 staffing process suggested improving the availability and knowledge of what to study (8%). Another 8% suggested a focus on identifying as many qualified candidates as possible rather than focusing on eliminating candidates.

When asked to suggest improvements to the interview, the most common comment was that the Key Leadership Competencies should be used but not overshadow individual experience and communication skills.

The most common suggestion to improve the methods used to assess candidates for future staffing processes is that job performance and experience be the priority when evaluating candidates, not exams and tests, as previously used (15%).

Joining ADM(Mat) as a Civilian ENG

One in five respondents (20%) joined ADM(Mat) as a civilian ENG within the past 2 years. Among the onboarding themes explored in this research with this group, training (90%), career development (87%), personal development (85%), and ENG staffing processes (83%) were deemed the most important.

5. Equity, Diversity and Inclusion

General Career Barriers

Engineers were asked to describe any barriers they may have faced or experienced when it comes to pursuing their career path in the Materiel Group. Overall, 44% believe they have faced a type of barrier, mainly a language profile barrier to their desired career path (16%), being a civilian with a lack of military experience (12%), a woman (4%), or other (11%).

Identity Career Barriers

More than 2 in 5 respondents (41%) self-identified as belonging to at least one employment equity (EE) group. More specifically, nearly 1 in 4 respondents (24%) self-identified as a member of a visible minority group, 16% self-identified as women, 3% as a person with a disability, 1% as an Indigenous person, and 3% as an EE group but refused to identify which one.

Engineers who experienced barriers in the workplace and are a member of at least one EE group were asked to describe which barriers, if any, they have experienced based on their identity. Nearly one in ten (9%) believe their gender was a barrier, 7% believe they faced language-related barriers, 4% believe being a civilian without military background was a barrier, 4% identified general discrimination for promotions, and 11% provided other examples. However, the majority did not experience a barrier or preferred not to answer (30% respectively).

When asked to suggest what programs should be instituted to help people overcome barriers experienced because of how they self-identify, the majority were not certain what could be done (59%). Themes for programs that should be instituted include changes in the leadership culture to assist those at a lower level, and encouragement to overcome barriers through training.

Armchair Discussions

Nearly 1 in 5 respondents (17%) specified that they participated in the armchair discussions related to employment equity. Some of the more common suggestions for topics they would like to see covered in future armchair discussions were career management or development (4%), as well as second language requirements at DND (3%).

Training for Needs of Employment Equity Groups

Roughly one-quarter of respondents suggested a training topic they believe would help individuals in the Materiel Group at large better understand the needs of certain groups who tend to face barriers because of how they self-identify. Training topics were focused on increasing the level of knowledge for different cultures and the barriers they experience in the workplace, as well as improving self-awareness and reducing cultural biases.

6. Community Management Feedback

Respondents were asked to provide their feedback on the role of the ENG Champion and on the purpose of the ENG Advisory Committee. Based on a brief description, 56% believe their purpose and role to be meaningful, 52% believe they are clear to them, 50% agree they are focused on the right things (50%), and 49% agree they are headed in the right direction.

Overall, more than 3 in 5 respondents (62%) rated each of the ENG 2025 working groups as extremely relevant or relevant to achieving ENG 2025's vision. The most relevant working groups were:

- Career Progression and Development (75%)
- ENG Competency Development (74%)
- Lateral Progression Programs and Processes (72%).

When suggesting additional working groups to meet ENG 2025's vision, common themes included focusing on technical or qualifications training to assist with career development, while others were interested in non-technical skills to improve communication and leadership.

In terms of the yearly ENG Forums, the Fall Community Forum was considered it to be extremely important or important by 54% of respondents and the Spring Technical Forum by 49%.

Respondents were asked to specify their preferred way to receive information from the ENG community. Over 3 in 5 respondents (62%) preferred receiving information via e-mail.

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Background and Research Objectives¹

The Material Group employs approximately 800 engineers who perform a wide range of roles in Capital Acquisition, In-Service Equipment Management, and Technical Specialties. The Materiel Group Engineering (ENG) community supports the Materiel Group priority of building and sustaining a professional Engineering community workforce. In response to the new Defence Policy: *Strong, Secure, Engaged* (SSE), the ENG Advisory Committee created ENG 2025, with the ultimate goal of reviewing the state of the engineering community in Defence¹. The aim of the ENG 2025 Initiative is to provide the tools and opportunities that will allow the ENG community to reach its full potential².

An Engineering Demographics Study was proposed to support the work of ENG 2025, which consists of two surveys. Director General Military Personnel Research and Analysis (DGMPPRA) has already conducted the first of two surveys for Assistant Deputy Minister (Materiel) or ADM(Mat) in 2018 - this was a demographic survey of all civilian engineers in the Material Group which provided preliminary data to ENG 2025.

Continued research aims to support ADM(Mat) in terms of potential changes to the engineer career stream, Materiel Acquisition & Support Transformation Campaign Plan Initiative 07, and the Department at large by aligning with the SSE Initiative 98 (i.e., professionalization of the procurement community).

ENG 2025 is now interested in attitudes of members of this occupation towards potential new initiatives. The committee is also interested in understanding the perspectives and experiences of diverse groups within the ENG occupation, including employment equity groups (i.e., women, visible minorities, persons with disabilities, Indigenous peoples) and a variety of ENG specializations (i.e. mechanical, electrical, aerospace, marine, etc.).

The findings from this research will be used by ADM(Mat) and the ENG 2025 Main Committee to inform changes to the engineering career. More specifically, the objectives of the quantitative research are as follows:

- Conduct an analysis of the demographic and related factors that could impact the ability of ADM(Mat) to hire and retain engineers;

¹ Wording for this section was adapted from the Statement of Work issued by DND: Department of National Defence, (2019), *ADM(MATERIEL) ENGINEER (ENG) 2025 SURVEY STATEMENT OF WORK*, pp. 1-2.

¹ (ENG 2025, 2017). Statement of Work for *ADM(MATERIEL) ENGINEER (ENG) 2025*, Ottawa, ON.

² (ADM[MAT], 2018). Statement of Work for *ADM(MATERIEL) ENGINEER (ENG) 2025*, Ottawa, ON.

- Improve the understanding of the professional development needs of the Materiel Group ENG community to inform the ENG 2025 initiative; and,
- Understand engineers' experiences with their career paths, in order to modernize the engineering occupation and increase the diversity of the engineering occupation.

The findings from this survey will be used by the ADM(Mat) and the ENG 2025 Main Committee to inform changes to the engineering career, including recruitment efforts, training opportunities, mentoring programs, and talent management.

Methodology

Summary

The research methodology consisted of an online survey with civilian engineers who work for ADM(Mat). Quorus was responsible for coordinating nearly all aspects of the research project including designing the research instrument, coordinating specific aspects of data collection and delivering the required research report and presentation documents.

Target Audience and Sample

The target population for the online survey met the following criteria:

- Civilian engineers 18+, and,
- Work for ADM(Mat).

The database of roughly 750 eligible survey candidates resides exclusively with the client team and was never shared with Quorus. As such, respondents were invited to participate through an email survey invitation sent out by the ENG 2025 committee. The committee took measures to ensure maximum response rates, which consisted of a unique link sent to each member of the ENG group via email, including two additional follow-up reminders.

The goal was to conduct a census of the ENG group. The research resulted in 261 completed surveys, a participation rate of 35%. The data in this report is not weighted. The distribution of this survey will not necessarily reflect the distribution of the civilian engineers who work for ADM(Mat). Results are not projectable to the entire ENG community given the high proportion of total non-response. These results represent the opinions of the sub-group of community members who were willing to provide their feedback, the profile of which is presented in the demographic data available in the appendix to this report.

Research Instrument Design

The survey instrument was designed in collaboration with the ENG 2025 point of contact, who coordinated input from the ENG 2025 committee and its working groups. The survey was divided into six main topic areas including peer support and mentorship, professional/career development, post-grad education support, promotion opportunities, equity/diversity/inclusion, and community management feedback. The survey instrument used in the online survey had an average completion time of 20-25 minutes and consisted of both closed and open-ended questions.

Additionally, Quorus designed other materials needed to engage respondents to participate in the survey, such as the email invitation or survey introduction screen. Upon approval by the client authority, DND (through the translation bureau) translated and verified all translated research materials. Respondents had the choice to complete the interview in English or French.

All research was conducted in accordance with the *Standards for the Conduct of Government of Canada Public Opinion Research – Online Surveys*.

Description of Data Collection Procedures

Upon approval of the final questionnaires by ENG 2025 and DGMPRA TA, Quorus programmed the online survey in both official languages using its licence to the Q-Fi survey platform. Quorus ensured the data is stored on Canadian servers. The research process included a pre-test of the questionnaire. The pre-test was launched with 15 potential respondents from which 5 participated, and whose results were included in the final sample. Data collection for the online survey took place from November 26th to December 21st, 2020.

Data Analysis

Due to the non-probability sampling from a list of ENG community members, a valid margin of error could not be calculated. Upon completion of all surveys, an unweighted data file was produced in SPSS. Results were cross-tabulated based on an analysis plan previously discussed with and approved by the Project Authority and the ENG group point of contact.

Responses to each open-ended question were coded into code lists based on key themes identified by Quorus analysts. This same process was followed for questions in which a pre-defined set of codes were presented to respondents and an open-ended “other” option to specify their response was offered.

For the multiple response questions in the survey instrument, results were scored as a percentage of all cases across the sample.

Continuous variables were coded in ranges, but also means were calculated and reported. The remaining closed-ended, single-answer questions were analyzed using descriptive statistics. Top-two box scores of scaled-questions were calculated to obtain net results throughout the report, allowing the identification of larger trends in frequencies. Top-two box scores equal the sum of the figures in the graph, but may vary slightly from data table figures due to rounding.

The focus of the analysis was on overall results but also cross-tabulated frequencies were produced to compare results among key subgroups of the population. The key subgroups, referred throughout the report as subgroups or key segments, had been previously identified in coordination with the team at DND, in an analysis plan document. In order to consider valid each of the subgroups proposed, we followed an approach to use subgroups with a minimum sample size of 30 cases. In terms of the statistical analysis performed to compare subgroups, the data was analyzed using independent t-tests for means and independent z-tests for percentages at a significance level of 95%. When reporting on subgroup differences, the usage of the term “significant” was excluded in the report based on the usage of a non-random sample with a small number of participants. The report includes only subgroup differences that were relevant to the context of the question; however, all subgroup differences are noted in red letters in the data tabulations submitted under separate cover.

Comparisons were conducted among the following population subgroups:

- Retired /active military engineers compared to non-military.
- Engineers sponsored through Materiel Acquisition & Support – Officer Development Program (MA&S ODP) compared to non-sponsored.
- Engineers who joined DND from industry, academia, or the public service.
- Men compared to women.
- Members of an Employment Equity group (EE; i.e., Women, Visible Minorities, Persons with Disabilities and Aboriginal People), compared to non-members of an EE group.
- Engineers identifying as a visible minority compared to those who do not belong to any Employment Equity group or those identifying as a member of another EE group.
- Respondents with an ENG-04 level or lower compared to ENG-05 level or higher.
- Engineers working in the Materiel Acquisition, Materiel Support or Regulatory & Technical Specialty domains.
- Engineers having been at their current level less than 5 years compared to those with more experience.

- Respondents who have worked for less than 5 years in the Materiel Group compared to those who have worked at least 5 years.
- Respondents with less than a year of experience, between 1 to 5 years of experience and those with 5 or more years of experience in their current position.
- Engineers working in the Director General of Land Equipment Program Management, (DGLPEM), Director General Maritime Equipment Program Management (DGMEPM) or Director General Aerospace Equipment Program Management (DGAPEM) divisions.
- Respondents whose highest level of education is a bachelor's degree compared to those with a master's or PhD.
- Respondents living in Quebec compared to those living in Ontario.

To note, the graphics included in this report may not show percentages smaller than 2%, for the benefit of a cleaner representation of results.

Finally, all research work was conducted in accordance with the professional standards established by the industry, and in accordance with applicable federal legislation (i.e., *Privacy Act*). More specifically, Quorus informed respondents of their rights under the *Personal Information Protection and Electronic Documents Act* and ensured that these rights are protected throughout the research process. This includes informing respondents of the purpose of the research, identifying both sponsoring department and research supplier, and informing participants that their participation in the study is voluntary and that the information provided will be administered according to the requirements of the *Privacy Act*.

Research Results

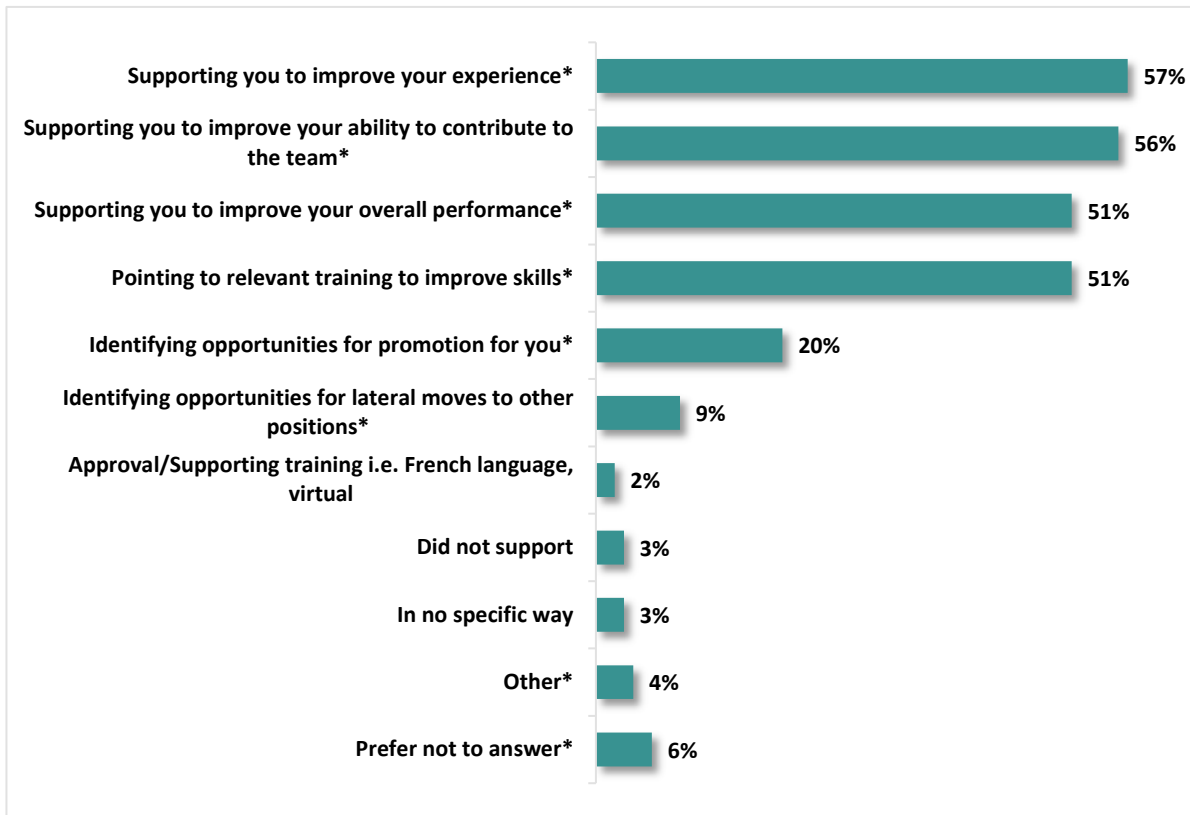
This report presents results for the 261 Defence Team personnel whose data was included in the analyses. See Appendix A for the full demographic profile of respondents.

1. Peer Support and Mentorship

1.1 Supervisor Support

Respondents were asked to provide the informal ways in which their supervisors have provided support to help improve job performance during the past year. The most common ways in which engineers mention having received support from supervisors are by receiving feedback and support to enhance their experience in their current role (57%) and support to improve their ability to contribute to the team (56%).

Figure 1 – Informal Support from Supervisors for Improving Job Performance



Q1. In which of the following informal ways have your supervisors supported you to improve your job performance during the last year? (SELECT ALL THAT APPLY) Base: All Respondents, n=261. *Response options presented to respondents.

More than 1 in 2 respondents received support to improve their overall performance (51%) and were pointed to relevant training to improve their skills (51%). One in five engineers (20%) reported that their supervisors helped to identify opportunities for promotion for them in the past year, while nearly 1 in 10 identified opportunities for lateral moves to other positions (9%).

Key Segments

Generally, engineers with less than 5 years of experience at their current level were more likely to report receiving support from their supervisors in many areas compared to engineers with more experience:

- Supporting you to improve your experience (68% vs 42%).
- Supporting you to improve your ability to contribute to the team (66% vs 42%).
- Pointing to relevant training to improve skills (60% vs 36%).
- Supporting you to improve your overall performance (59% vs 40%).
- Identifying opportunities for promotion for you (24% vs 14%).

More specifically, segments more likely to report receiving **support to improve their experience** include:

- Respondents who worked in the public service before joining DND, compared to those stemming from academia (70% vs 64%).
- Engineers having been at their current level less than 5 years compared to those with more experience (68% vs 42%).
- Respondents under 55 years old, compared to older respondents (61% vs 44%).

Segments more likely to report receiving **support to improve their ability to contribute to the team** include:

- Respondents under 35 years old, compared to respondents at least 55 (86% vs 52%).
- Engineers having been at their current level less than 5 years compared to those with more experience (66% vs 42%).

Engineers with less than 5 years worked at their current level were more likely to report receiving **support to improve their overall performance** when compared to those with more experience (59% vs 40%).

Segments more likely to report **being pointed to relevant training to improve skills** include:

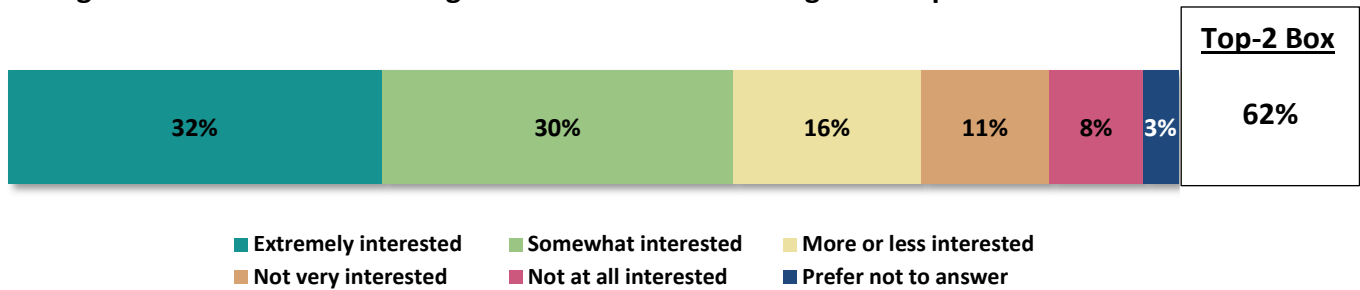
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (63% vs 47%).
- Engineers having been at their current level less than 5 years compared to those with more experience (60% vs 36%).
- Engineers whose current working division is the DGLEPM compared to those working in the DGMEPM (59% vs 36%).
- Non-military engineers compared to active/retired military engineers (56% vs 40%).

Engineers working in the DGMEPM (27%) and the DGLEPM (23%) were more likely to report their supervisors **identifying opportunities for promotion** when compared to those in the DGAEPM (4%).

1.2 Job Performance Coaching

In terms of new ways to provide support, respondents were asked to provide their interest level in receiving job performance coaching from their supervisor. Nearly 2 in 3 engineers (62%) were extremely or somewhat interested in receiving job performance coaching from their supervisor, among whom 32% were extremely interested.

Figure 2 – Interest in Receiving Job Performance Coaching from Supervisor



Q2. How interested are you in receiving job performance coaching from your supervisor? Base: All Respondents, n=261.

Key Segments

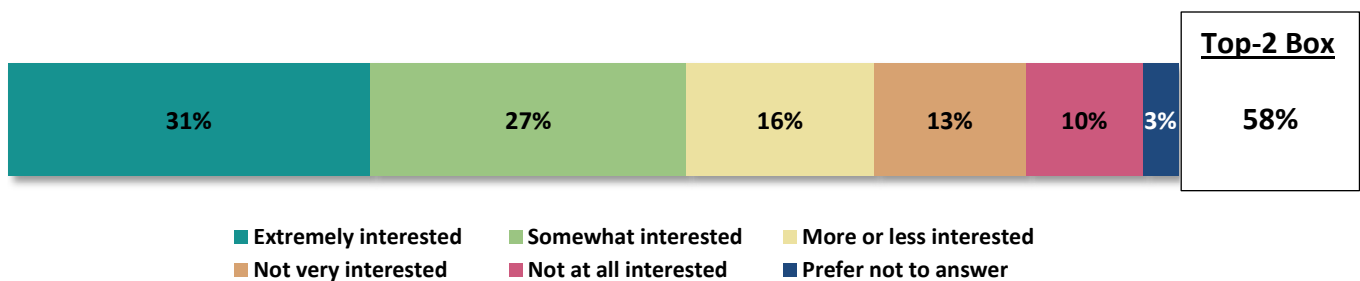
Segments more likely to be interested in receiving job performance coaching from their supervisor include:

- Respondents who worked in the public service before joining DND (77%), compared to those working for the Defence industry (55%) or the CAF (48%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (73% vs 58%).
- Non-military engineers compared to active/retired military engineers (67% vs 51%).
- Engineers under 55 years old when compared to older respondents (66% vs 48%). In fact, the younger respondents are, the more interested they are in this type of coaching – over half (53%) of respondents 18 to 34 years old are *extremely* interested, compared to 23% of respondents 55 years old or older.

1.3 Career Development Coaching

Respondents were also asked to express their level of interest in receiving career development coaching from their supervisor. Nearly 3 in 5 engineers (58%) were extremely or somewhat interested in receiving career development coaching from their supervisor, with 31% indicating they are extremely interested.

Figure 3 – Interest in Receiving Career Development Coaching from Supervisor



Q3. How interested are you in receiving career development coaching from your supervisor? Base: All Respondents, n=261.

Key Segments

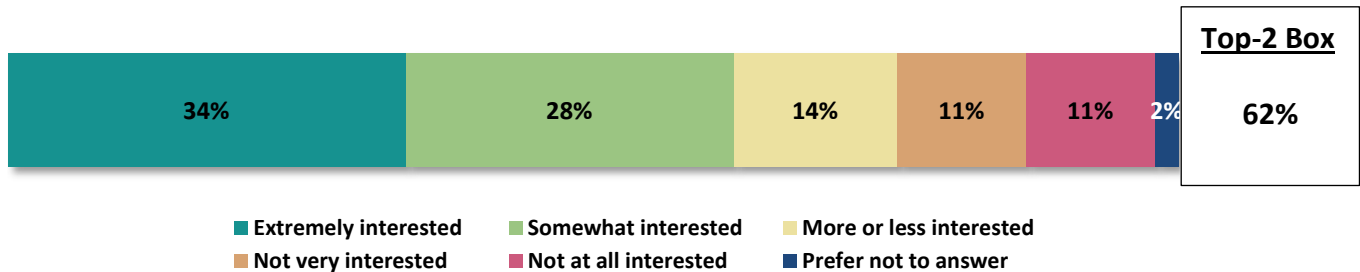
Segments that report more than their counterparts to be extremely or somewhat interested in receiving career development coaching from their supervisor include:

- Engineers who identify themselves as a visible minority compared to those who are not a member of an Employment Equity group (75% vs 50%).
- Women compared to men (74% vs 55%).
- Respondents who identify as a member of an Employment Equity group compared to those who do not (70% vs 50%).
- Engineers sponsored through Materiel Acquisition & Support compared to those with no sponsorship (68% vs 54%).
- Non-military engineers compared to active/retired military engineers (67% vs 40%).
- Engineers having been at their current level less than 5 years compared to those with more experience (65% vs 48%).
- Respondents under 55 years old compared to those 55 years or older (64% vs 38%).

1.4 Interest in Formal Mentorship Resources

Another way of support explored included formal mentorship resources. Respondents were asked to describe their interest level in receiving this type of support and results show that nearly 2 in 3 engineers (62%) were extremely or somewhat interested in receiving formal mentorship regarding their career development.

Figure 4 – Interest in Receiving Formal Mentorship Regarding Career Development



Q4. How interested are you in receiving formal mentorship regarding your career development? Base: All Respondents, n=261.

Over 3 in 10 respondents (34%) were extremely interested in receiving formal mentorship regarding their career development. More than 1 in 10 respondents (11%) were not at all interested in receiving formal mentorship regarding their career development.

Key Segments

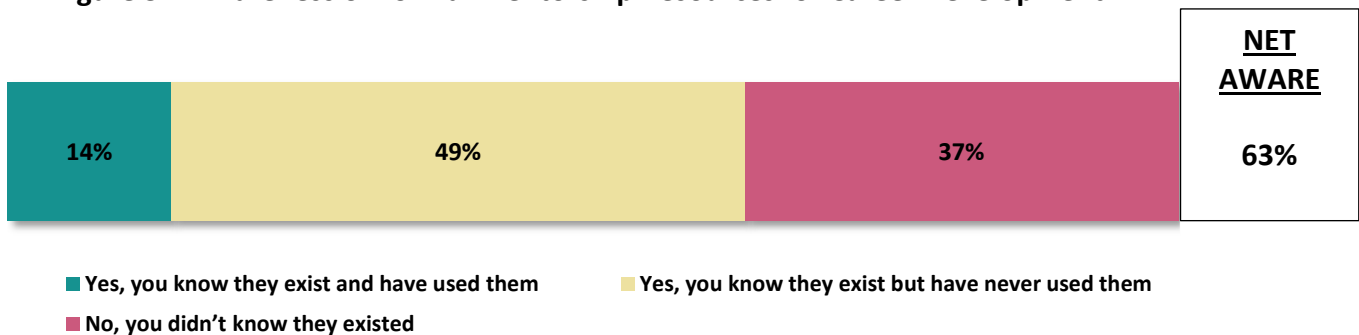
Segments that report more than their counterparts to be extremely or somewhat interested in receiving formal mentorship regarding their career development include:

- Women compared to men (80% vs 57%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (78% vs 52%).
- Respondents who identify as a member of an Employment Equity group compared those who do not (74% vs 52%).
- Engineers having been at their current level less than 5 years compared those with more experience (69% vs 50%).
- Respondents 18 to 54 years old (69%) when compared to those 55 years or older (39%).
- Non-military engineers compared to active/retired military engineers (68% vs 51%).
- Respondents with an ENG-04 level or lower compared to those ENG-05 or higher level (68% vs 55%).

1.5 Awareness of Formal Mentorship Resources

Regarding existing resources, nearly 2 in 3 respondents (63%) were aware that there are formal mentorship resources available to assist in career development.

Figure 5 – Awareness of Formal Mentorship Resources for Career Development



Q5. Are you aware that there are formal mentorship resources available to you to help you in your career development? Base: All Respondents, n=261.

Slightly more than 1 in 10 engineers (14%) were **aware and have made use of formal mentorship resources** available to assist in career development, while 49% were **aware but have not made use of formal mentorship resources**. The remaining 37% were **unaware** of these resources.

Key Segments

Awareness and use of formal mentorship resources was relatively higher among the following groups:

- Women compared to men (26% vs 12%).
- Engineers sponsored through Materiel Acquisition & Support compared to those with no sponsorship (25% vs 11%).
- Engineers working in the Materiel Acquisition domain compared to those in the Materiel Support domain (18% vs 5%).

Awareness without use of formal mentorship resources was relatively higher among the following:

- Engineers 55 years or older (64%) compared to younger respondents (50%).
- Respondents who do not identify as a member of an Employment Equity group compared to those who do (55% vs 42%).
- Men compared to women (53% vs 33%).
- Engineers working in the Regulatory & Technical Specialty compared to those in the Materiel Acquisition domain (60% vs 44%).

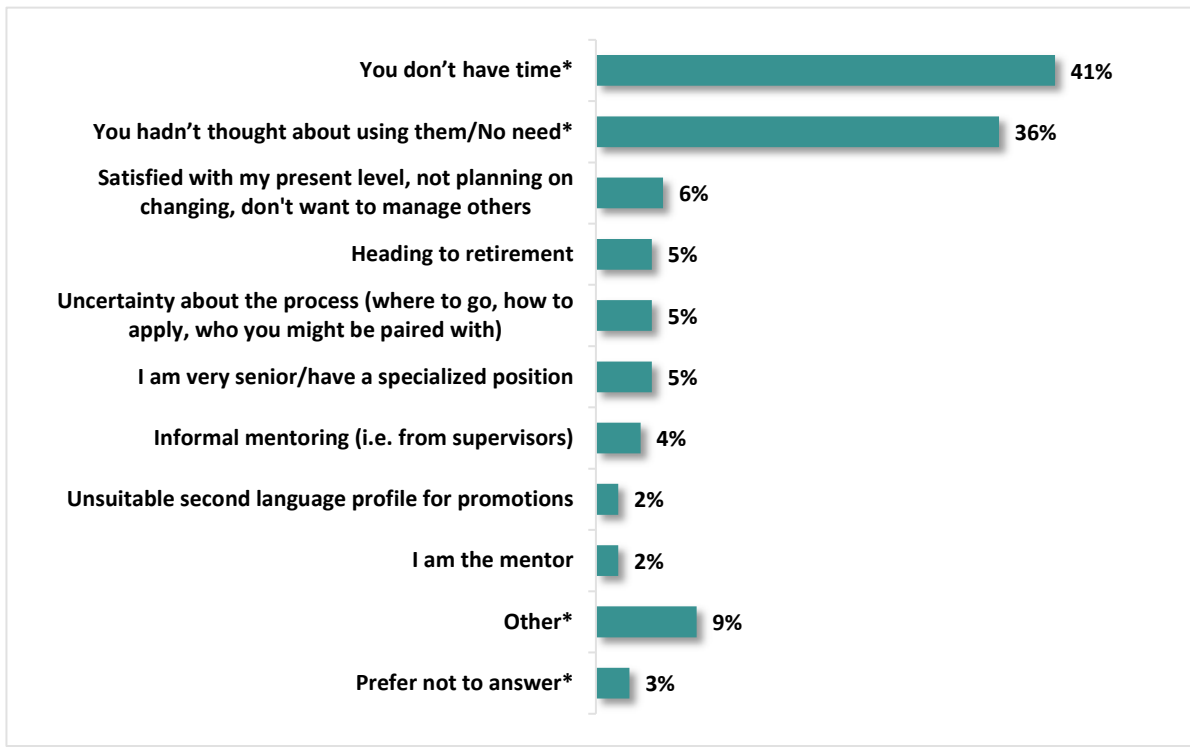
Lack of general awareness was higher among these groups:

- Respondents with an ENG-04 level compared to those of ENG-05 level or higher (44% vs 25%).
- Engineers having been at their current level less than 5 years compared to those with more experience (43% vs 25%).

1.6 Reasons Behind Lack of Use of Formal Mentorship Resources

Respondents aware of formal mentorship resources and who had not made use of them for their career development were asked to explain why these resources had not been used. More than 2 in 5 of these respondents (41%) cited a lack of available time as the main reason.

Figure 6 – Main Reasons for Not Using Formal Mentorship Resources



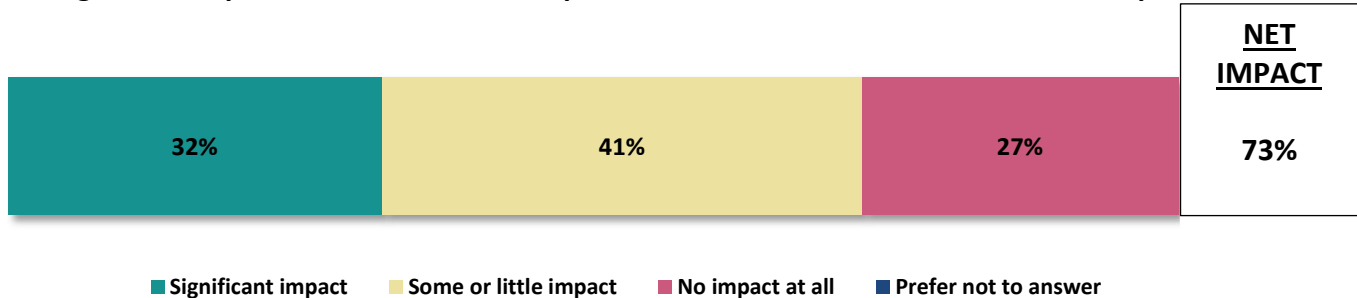
Q6. What are the main reasons you have not used these formal mentorship resources? (SELECT ALL THAT APPLY) Base: Respondents who are aware of formal mentorship resources but have not used them, n=128. *Response options presented to respondents.

In general, more than 1 in 3 respondents (36%) had not considered using formal mentorship resources or felt that they had no need for them for an unspecified reason. The remaining engineers cited a number of other specific reasons most of which point to not needing or wanting further development based on their position, specialization or stage in their career.

1.7 Users of Formal Mentorship Resources

Respondents who were aware of formal mentorship resources and have made use of them were asked to describe the extent to which these resources have had a positive impact on their career development while in the Materiel Group. Overall, nearly 3 in 4 of these engineers (73%) reported that these resources had a significant, some or a little positive impact on their career in the Materiel Group.

Figure 7 – Impact of Formal Mentorship Resources on Career in the Materiel Group



Q7. To what extent have these formal mentorship resources had a positive impact on your career in the Materiel Group? Base: Respondents who are aware of formal mentorship resources and have used them, n=37.

More specifically, nearly 1 in 3 respondents who have made use of formal mentorship resources (32%) reported that they had a significant positive impact on their career in the Materiel Group, 41% reported these resources had some or a little impact, and 27% reported these resources had no impact at all on their career in the Materiel Group.

2. Professional/Career Development

2.1 Career Development Priorities

Various aspects of professional and career development were explored, including career priorities, perceived opportunities for training, as well as participation in and expectations of the deployment pool.

First, respondents rated a variety of areas in terms of how important they are to their professional/career development in the Materiel Group over the next 12 months. Overall, most of the highest priority items (very high or somewhat of a priority) were related to the honing and development of specific skills:

- Honing of communications skills (67%).
- Honing leadership skills (62%).
- Developing new technical skills (60%).

- Honing of technical skills (60%).

Among the highest priority items (very high or somewhat a priority) were also opportunities to access and explore the following items:

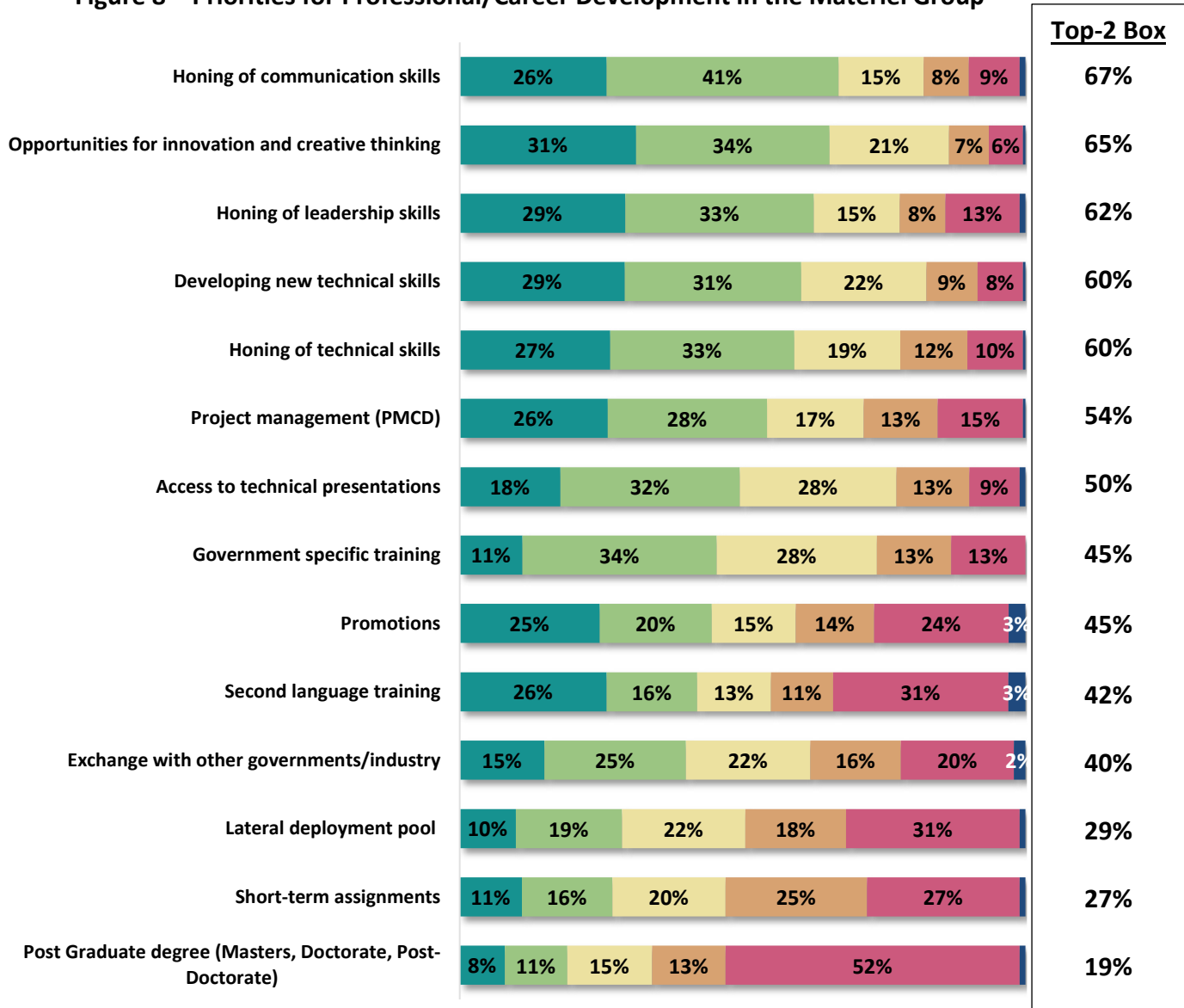
- Opportunities for innovation and creative thinking (65%).
- Project Management (PMCD) (54%).
- Access to technical presentations (50%).
- Government specific training (45%).
- Promotions (45%).
- Second language training (42%).

The following were considered less of a priority for professional/career development in the Materiel Group over the next 12 months:

- Exchange with other governments or industry (40%).
- Lateral deployment pool (29%).
- Short-term assignments (27%).
- Post-graduate degrees (19%).

The item most commonly considered **not at all a priority** for professional/career development was achieving a Post Graduate degree (52%).

Figure 8 – Priorities for Professional/Career Development in the Materiel Group



Very high priority Somewhat of a priority Neutral Not much of a priority Not at all a priority Don't know

Q8. Considering the next 12 months, how much of a priority is each of the following when it comes to your professional/career development in the Materiel Group?
Base: All respondents, n=261.

Key Segments

Analysis of the top priorities shows that the segments that tend to indicate that **honing of communication skills** is a very high or somewhat of a priority include:

- Women compared to men (83% vs 65%).

- Respondents sponsored through Materiel Acquisition & Support compared to those without a sponsorship (81% vs 64%).
- Engineers working in the public sector prior to joining DND compared to the Canadian Armed Forces (80% vs 62%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (79% vs 62%).
- Engineers who identify as a member of an Employment Equity group compared to those who do not (75% vs 62%).

Engineers working at any division tend to report **opportunities for innovation and creative thinking** as a priority more than those in the DGMEPM division (54% vs 48%).

The segments that tend to indicate that **honing of leadership skills** is a very high or somewhat of a priority include:

- Engineers working in the public service prior to joining DND (77%) or stemming from academia (69%) compared to the Canadian Armed Forces (48%).
- Women compared to men (74% vs 59%).
- Respondents sponsored through Materiel Acquisition & Support compared to those without a sponsorship (73% vs 59%).
- Engineers who identify as a member of an Employment Equity group compared to those who do not (70% vs 56%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (70% vs 56%).
- Non-military engineers compared to active/retired military engineers (69% vs 50%).
- Respondents under 55 years old compared to older respondents (68% vs 42%).

The segments that tend to indicate that **developing new technical skills** is a very high or somewhat of a priority include:

- Respondents under 35 years old compared to older respondents (75% vs 57%).
- Engineers currently working in the DGAEPM division compared to those working in the DGLEPM division (74% vs 57%).
- Engineers working in the Regulatory & Technical Specialty domain compared to those in the Materiel Acquisition domain (73% vs 57%).
- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (69% vs 51%).
- Engineers identifying themselves as a visible minority compared to those who belong to another Employment Equity group (65% vs 47%).

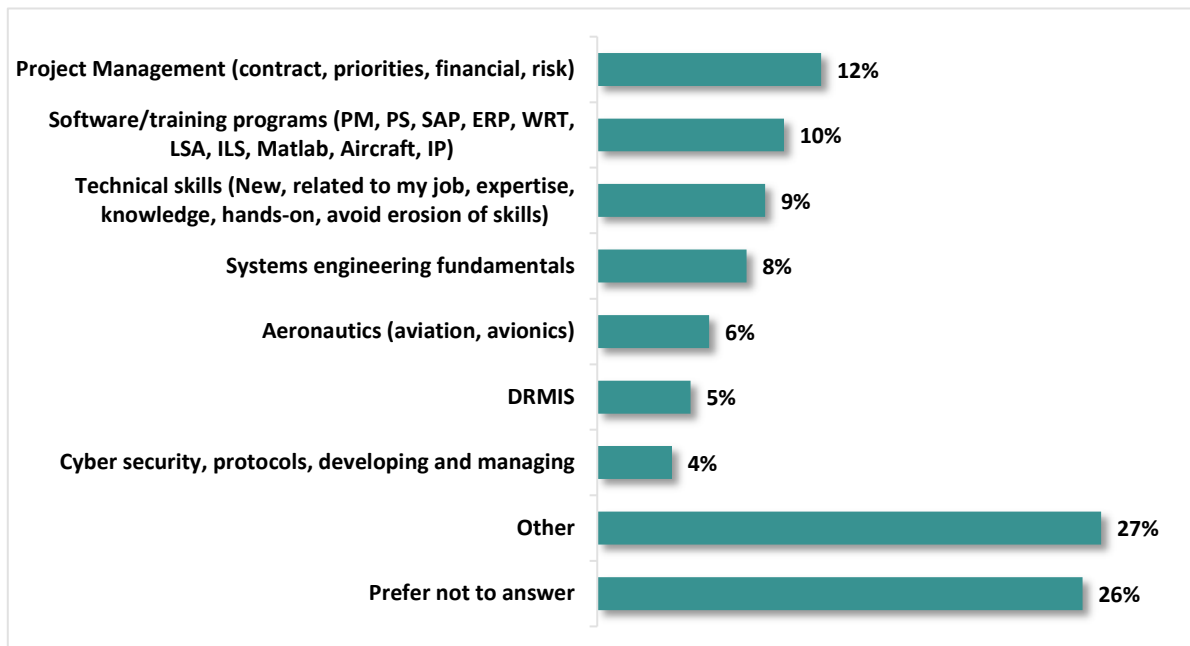
The segments that tend to indicate that **honing of technical skills** is a very high or somewhat of a priority include:

- Respondents who have worked for less than 5 years in the Materiel Group compared to those who have worked at least 5 years (76% vs 53%).
- Respondents under 35 years old compared to older respondents (75% vs 57%).
- Engineers working in the Regulatory & Technical Specialty domain (75%) compared to those in the Materiel Support (57%) or the Materiel Acquisition (56%).
- Engineers identifying themselves as a visible minority compared to those who belong to another Employment Equity group (62% vs 44%).

2.2 Priority Technical Skills

Respondents who indicated that honing or developing new technical skills was a priority for them were asked to describe which specific technical skills would be important to hone or develop. The most common technical skills mentioned related to broad skills across engineering domains as more than 1 in 10 (12%) were focused on developing project management related skills. Roughly 1 in 10 focused on software/training programs (10%), general technical skills (9%) and systems engineering fundamentals (8%).

Figure 9 – Specific Technical Skills to Hone or Develop



Additional Technical Skills Mentioned			
<i>(3% or lower)</i>			
Artificial intelligence	3%	Business Case Analysis	2%
Naval-experience, architecture, building	3%	Test plan development	2%
Technical/policy writing and engaging	3%	Airworthiness	2%
Armaments, ammunitions and explosives	2%	Data management/trend analysis	2%
Engineering design (science, skills)	2%		

Q9. You indicated that honing or developing new technical skills is a priority for you. Which specific technical skills would be important for you to hone or develop? Base: Respondents who answered “somewhat” or “very much” to either honing or developing technical skills, n=172.

The remainder of responses focused on technical skills based on elements specific to one’s role in the ENG community, including aeronautics (6%), DRMIS (5%) and cyber security (4%).

Key Segments

Respondents working in the Canadian Armed Forces prior to joining DND were more likely to indicate that **project management** was an important technical skill to hone or develop when compared to those who were in academia prior to joining DND (20% vs 8%).

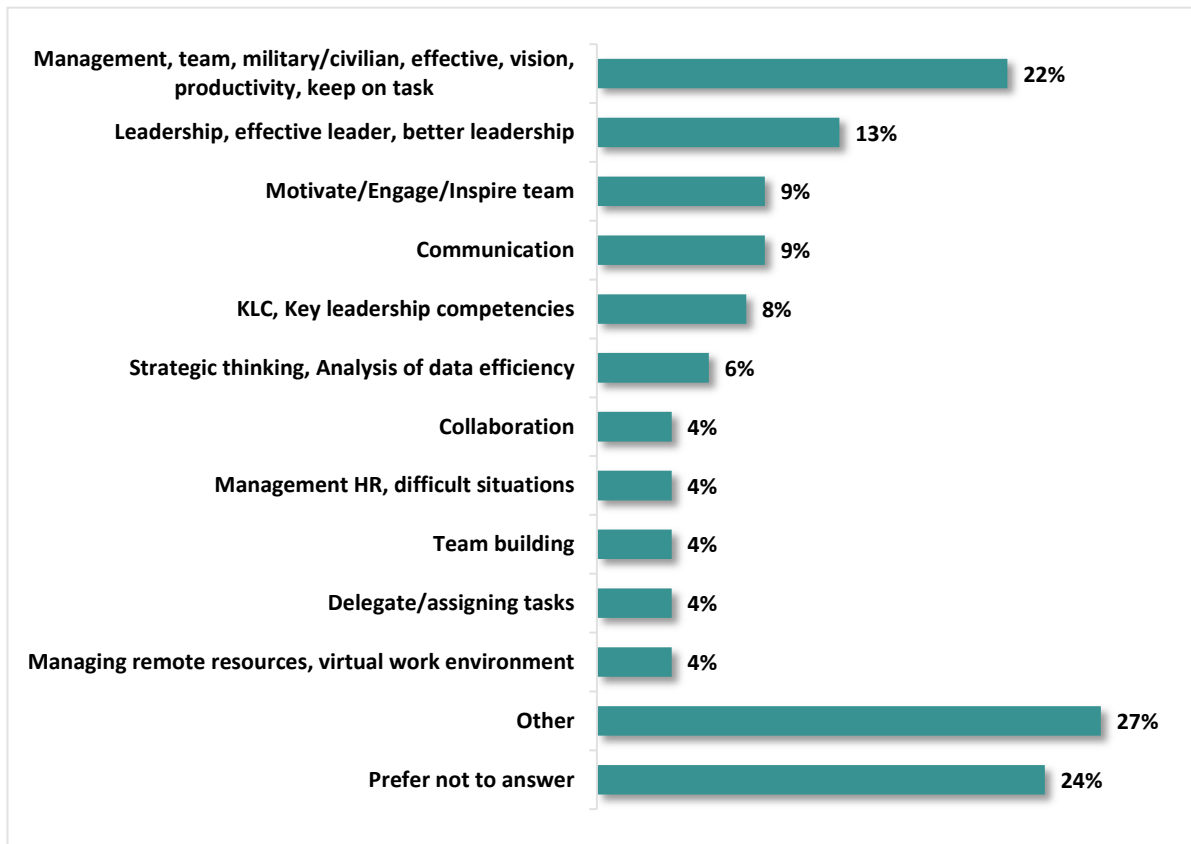
Engineers 55 years or older were more likely to indicate that **software/training programs** were an important technical skill to hone or develop when compared to those 18 to 34 years old (19% vs 4%).

Engineers currently working in the DGAEPM division were more likely to indicate **technical skills** in general were important to hone or develop when compared to those in the DGMEPM division (16% vs 3%).

2.3 Priority Leadership Skills

Among engineers who indicated that honing leadership skills was a priority, the most common skills related to broad elements such as effective management (22%), effective leadership (13%), engagement (9%) and communication (9%).

Figure 10 – Specific Leadership Skills to Learn or Develop



Additional Leadership Skills Mentioned (3% or lower)			
Empathy, compassion	3%	French language improvement	1%
Identifying/improving weaknesses with team members, follow-up	2%	Public speaking, presentations	1%
Stimulate change, cultural change	2%	Mentor, career development support	1%
Negotiation	1%		

Q10. You indicated that **honing your leadership skills** is a priority for you. Which specific skills would be important for you to learn or develop? Base: Respondents who answered “somewhat” or “very much” to honing leadership skills, n=162.

The remainder of responses touched on specific communication skills including key leadership competencies (8%), strategic thinking (6%), collaboration (4%) and HR training to help them manage difficult situations (4%), among others.

Key Segments

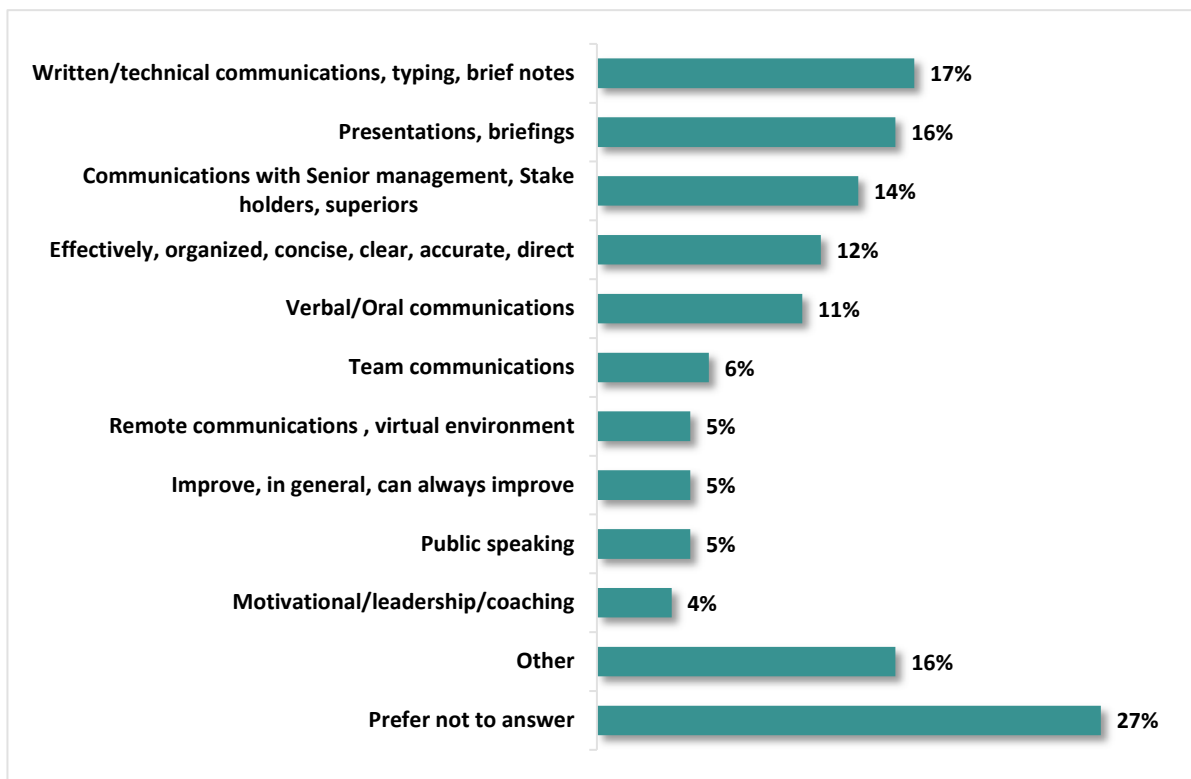
Non-military engineers were more likely to indicate the learning and development of **communication skills** as a priority, compared to active/retired military engineers (11% vs 2%).

Engineers with at least a master’s degree are more likely than those with a bachelor’s degree to indicate as their priority to learn and develop **key leadership competencies** (16% vs 1%).

2.4 Priority Communication Skills

Among engineers who indicated that honing communication skills was a priority, the most common ones mentioned included written/technical communications (17%), presentations/briefings (16%), communications with key personnel (14%), verbal/oral communications (11%), team communications (6%), and remote communications (5%).

Figure 11 – Specific Communication Skills to Learn or Develop



Additional Communication Skills Mentioned (3% or lower)			
Both official languages	3%	Achievements/successes	1%
Communication with subordinates	1%	Skills required to become ENG-06-EX	1%
Communication with civilians	1%	Listening, passive and active	1%
Influence and persuade	1%		

Q11. You indicated that **honing your communication skills** is a priority for you. Which specific skills would be important for you to learn or develop? Base: Respondents who answered “somewhat” or “very much” to honing communication skills, n=177.

Key Segments

When suggesting a high priority communication skill, respondents with between 1 to 5 years of experience in their current position (21%) and those with less than a year of experience in their current position (18%) were more likely to select **presentations and briefings** when compared to those with 5 or more years of experience in their current position (3%).

Engineers working in the Materiel Acquisition engineering domain were more likely to prioritize **written/technical communications** when compared to those working in Materiel Support domain (22% vs 8%).

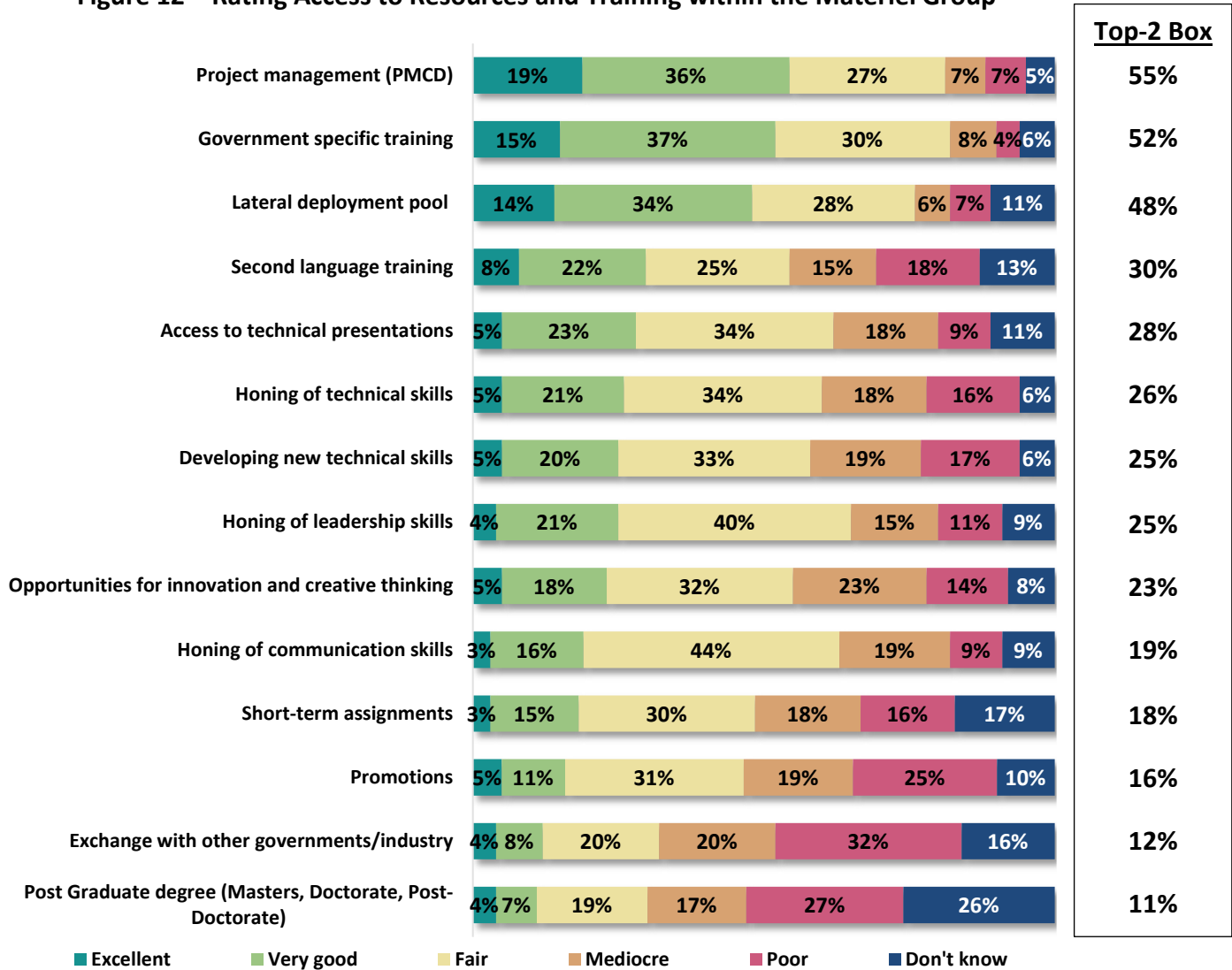
Engineers working in the public service prior to joining DND were more likely to prioritize **effective/organized communications** when compared to those working in the Canadian Armed Forces (20% vs 3%).

Conversely, respondents working in the Canadian Armed Forces were more likely to prioritize **verbal/oral communications** when compared to those working in the public service prior to joining DND (16 vs 3%).

2.5 Opportunities within the Materiel Group

Perceived opportunities to access training were explored among survey participants. Respondents were asked to rate the opportunities they have to access a list of available resources and types of training to assist in professional/career development within the Materiel Group. Overall, more than 1 in 10 respondents (11%) rated access to each of the resources and training as excellent or very good. More than 1 in 2 engineers rated access to resources and training for project management (55%) and Government specific training (52%) as excellent or very good within the Materiel Group. The lateral pool also received relatively positive ratings, as seen through the 48% who considered it excellent or very good.

Figure 12 – Rating Access to Resources and Training within the Materiel Group



Q12. How would you rate the opportunities you have to access the following resources and types of training to help you in your professional/career development **within the Materiel Group**? Base: All respondents, n=261.

Areas that received strong levels of satisfaction by 20% to 30% of respondents included access to technical presentations (28%) and opportunities for innovation/creative thinking (23%).

More than 1 in 5 participants rated access to various skill-based resources and training as excellent or very good, including second language training (30%), honing of technical skills (26%), developing new technical skills (25%), honing of leadership skills (25%) and honing of communication skills (19%).

Key Segments

Analysis of the top priorities shows that segments stating more than their counterparts that the opportunities to access **Project Management (PMCD)** training are excellent or very good include:

- Respondents 18 to 34 years old compared to older respondents (72% vs 53%).
- Respondents who have been in their current position for one year or less, compared to those who have been in their current position for at least 5 years (68% vs. 45%).
- Engineers in the Materiel Acquisition domain compared to those in the Regulatory and Technical Specialty domain (67% vs 40%).
- Engineers in the DGLEPM working division compared to those in the DGMEPM division (65% vs 46%).
- Engineers at the ENG-04 level or lower compared to those at the ENG-05 level or higher (62% vs. 48%).

Engineers sponsored through Materiel Acquisition & Support were more likely to report access to the **lateral deployment pools** as excellent or very good when compared to those without MA&S ODP sponsorship (62% vs 44%).

Engineers working at the DGMEPM division are the least likely to say the access to **second language training** is excellent or very good (16%), compared to respondents from other divisions (34%).

Segments stating more than their counterparts that the opportunities to access **honoring of technical skills** as excellent or very good include:

- Engineers who have been in their current position 5 or less years, compared to those who have been in their current position at least 5 years (30% vs. 14%).
- Engineers in Ontario compared to those in Quebec (29% vs 15%).

2.6 Relationship between Access and Perceived Importance

To evaluate the extent to which priorities of engineers in the Materiel group are being met, the relationship between the priorities for their career development and the access to resources and training for this purpose was calculated using the top-two values from the questions addressing these perceptions. The larger the gap between priorities and access to training, the larger the issue for career development.

The areas that experienced the largest gaps include honing of communication skills (48%), opportunities for innovation and creative thinking (42%), honing of leadership skills (37%), developing of new technical skills (35%) and honing of technical skills (34%).

Figure 13 – Career Development Gaps While Working in the Materiel Group

Resources and Types of Training	Priority for Career Development	Access to Resources and Training	Gap in Needs of Engineers
Honing of communication skills	67%	19%	48%
Opportunities for innovation and creative thinking	65%	23%	42%
Honing of leadership skills	62%	25%	37%
Developing new technical skills	60%	25%	35%
Honing of technical skills	60%	26%	34%
Promotions	45%	16%	29%
Exchange with other governments / industry	40%	12%	28%
Access to technical presentations	50%	28%	22%
Second language training	42%	30%	12%
Short-term assignments	27%	18%	9%
Post Graduate degree (Masters, Doctorate, Post-Doctorate)	19%	11%	8%
Project management (PMCD)	54%	55%	-1%
Government specific training	45%	52%	-7%
Lateral deployment pool	29%	48%	-19%

Q8. Considering the next 12 months, how much of a priority is each of the following when it comes to your professional/career development in the Materiel Group? Base: All respondents, n=261. Q12. How would you rate the opportunities you have to access the following resources and types of training to help you in your professional/career development within the Materiel Group? Base: All respondents, n=261.

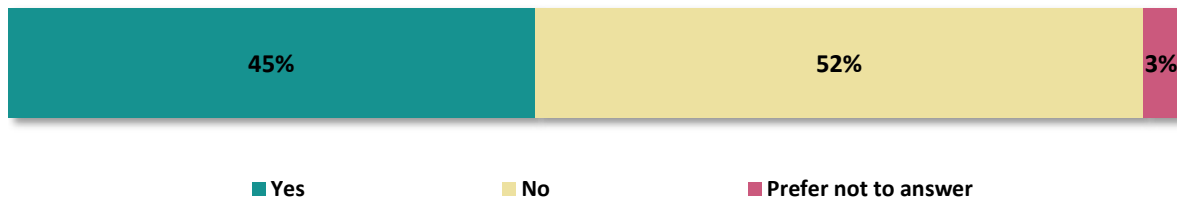
Additional areas experiencing a gap in between access and priority include promotions (29%), exchange with other governments / industry (28%) and access to technical presentations (22%). Areas with a smaller gap comparatively are second language training (12%), short-term assignments (9%) and post graduate degrees (8%).

On the opposite end of the scale, areas that are being met or exceeded include the lateral deployment pool (19%), government specific training (7%) and project management (1%).

2.7 Lateral Deployment Pool Participation

Nearly 1 in 2 respondents (45%) reported that they had joined the lateral deployment pool while working in the Materiel Group.

Figure 14 – Joining the Lateral Deployment Pool While Working in the Materiel Group



Q13. While working in the Materiel Group, have you joined the lateral deployment pool? Base: All Respondents, n=261.

Key Segments

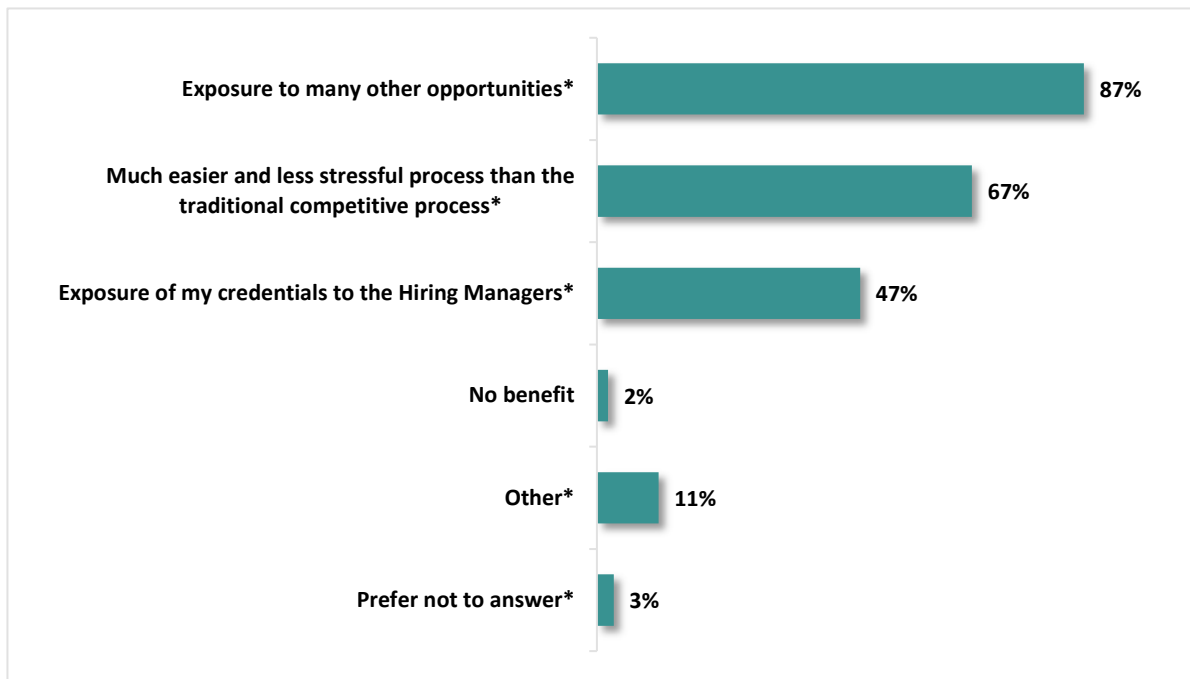
Segments more likely to have joined the lateral deployment pool when compared to their counterparts include:

- Respondents in Quebec compared to those living in Ontario (65% vs 48%).
- Engineers sponsored through Materiel Acquisition & Support compared to those without MA&S ODP sponsorship (57% vs 42%).
- Respondents having been at their current level 5 or more years compared to those with less experience (54% vs 40%).
- Non-military engineers compared to active/retired military engineers (50% vs 37%).

2.8 Benefits of the Lateral Deployment Pool

Nearly 9 in 10 participants who joined the lateral deployment pool while working in the Materiel Group (87%) described exposure to many other opportunities as the main benefit of access to the pool. Two thirds (67%) described the ease and reduced stress of the process compared to the traditional competitive process as the main benefit of access to the pool while 47% mentioned the exposure of their credentials to hiring managers as the main benefit of using the pool.

Figure 15 – Main Benefits of Access/Usage of a Lateral Deployment Pool



Q14. What would you describe as being the main benefits of having access to or using a lateral deployment pool? (SELECT ALL THAT APPLY) Base: Respondents who joined the lateral deployment pool while working in the materiel group, n=118. *Response options presented to respondents.

Key Segments

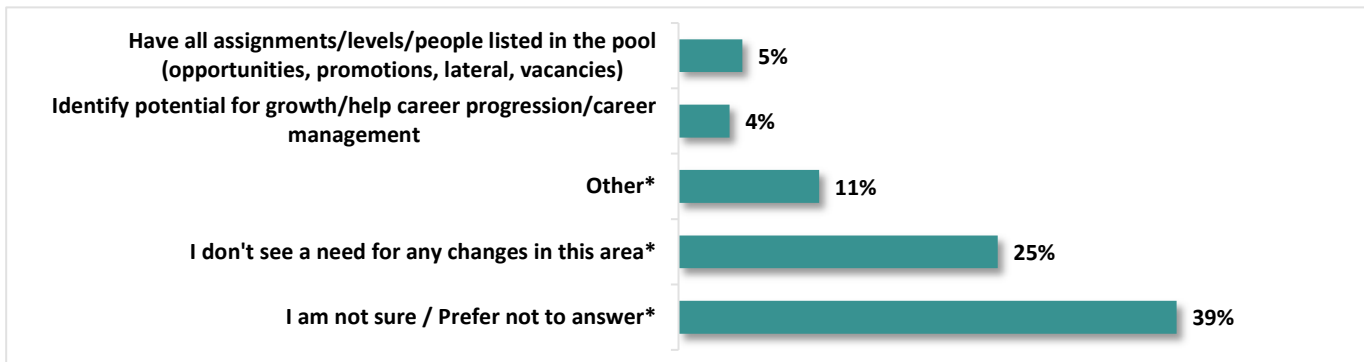
The older respondents are, the more likely they are to describe the main benefit of access to the lateral deployment pool as **exposure of credentials to the hiring managers**. This was noted by 18% of respondents 18 to 34 years old, 45% of those 35 to 54 years old, and 70% of those at least 55 years old.

Engineers whose current working division is DGLEPM were more likely to describe the main benefit of access to the lateral deployment pool as **being an easier and less stressful process than the traditional competitive process** when compared to those in the DGAEPM working division (82% vs 53%).

2.9 Evolution of Lateral Deployment Pools

Looking into the future, respondents were asked to describe how they would like the lateral deployment pools evolve over the next 5 years. Respondents were most likely to describe the inclusion of all opportunities and promotions based on lateral deployment and current vacancies (5%), followed closely by identifying potential for growth and assistance with career progression/management (4%).

Figure 16 – Suggestions for How the Lateral Deployment Pools Could Evolve Over the Next 5 Years



Additional Changes to Lateral Deployment Pools (3% or lower)			
Include all DND and government departments and partner organizations	3%	Include short-term and/or acting assignments	2%
Searchable, dedicated website/database	3%	Be more transparent (how the list is managed)	1%
Clearly defined roles & responsibilities, position requirements, technical capabilities	3%	Language profiles restrict lateral transfers	1%
Prioritize using the pool/necessary part of hiring/advancement (instead of looking outside)	2%	Fully accessible to hiring managers	1%
Employee accessible, all candidates can see opportunities (instead of waiting to be contacted)	2%	Remove the pool/have competitions/fix hiring	1%
Continual refreshment of the pool (Automation)	2%		

Q15. In what way(s), if at all, would you like to see lateral deployment pools evolve over the next 5 years? Base: All Respondents, n=261. *Response options presented to respondents.

Respondents listed a wide arrangement of suggestions focusing on broadening the scope of the lateral deployment pools as well as including improved communication with those who join the pool over the next 5 years.

One in four respondents (25%) did not see a need for any changes in the lateral deployment pools over the next 5 years and another 39% were not sure how the lateral deployment pools could evolve.

Key Segments

Respondents whose current working division was DGAEPM were more likely to mention **having all assignments and opportunities listed in the lateral deployment pools** (15%) over the next 5 years when compared to those in the DGMEPM (4%) and the DGLEPM (3%) working divisions.

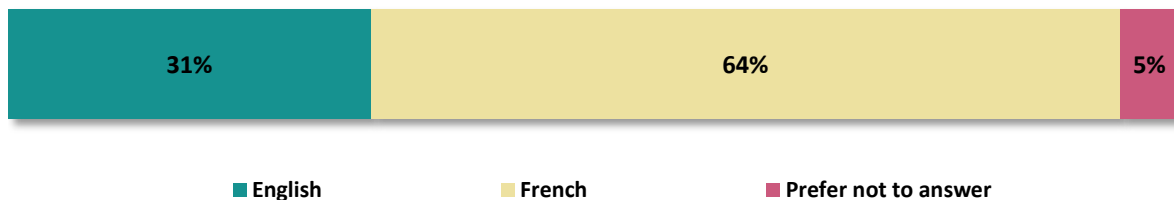
Segments more likely to state that they see **no need for any changes in this area** include:

- Engineers from the Canadian Armed Forces (38%) compared to those previously working in the public service (18%) and the Defence industry (7%) prior to joining DND.
- Retired/active military engineers compared to non-military engineers (37% vs 18%).
- Engineers stemming from academia compared to those previously working in the public service prior to joining DND (24% vs 7%).

2.10 Second Language Identification

Availability and suitability of second language training and efforts were explored. To start, respondents were asked to specify which of Canada's official languages they considered as their second language. Nearly 2 in 3 respondents (64%) considered their second language to be French, while nearly 1 in 3 (31%) described their second language as English.

Figure 17 – English or French as a Second Language

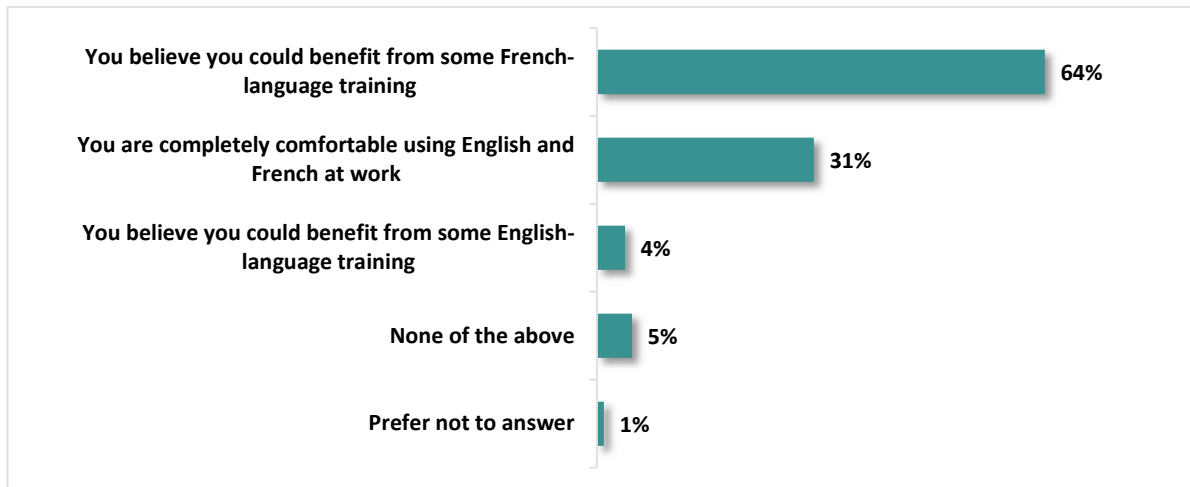


Q16. Do you consider English or French as your second language? Base: All Respondents, n=261.

2.11 Language Training at Work

Nearly 2 in 3 respondents (64%) believe they could benefit from some French-language training when describing their level of comfort using French at work. Nearly 1 in 3 respondents (31%) feel they are comfortable using both English and French at work, and therefore do not require language training at work. Few respondents (4%) feel they could benefit from some English-language training when describing their level of comfort using English at work.

Figure 18 – Language Training Using English and French at Work



Q17. Regarding language training, which of the following best describes your level of comfort in using English and French at work: (SELECT ALL THAT APPLY) Base: All Respondents, n=261.

Key Segments

Segments tending to specify they **could benefit from French-language training** at work more than their counterparts include:

- Respondents in Ontario compared to those in Quebec (75% vs 19%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (78% vs 58%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (75% vs 58%).
- Non-military engineers compared to active/retired military engineers (69% vs 57%).

Segments tending to specify they **are comfortable in either official language** at work include:

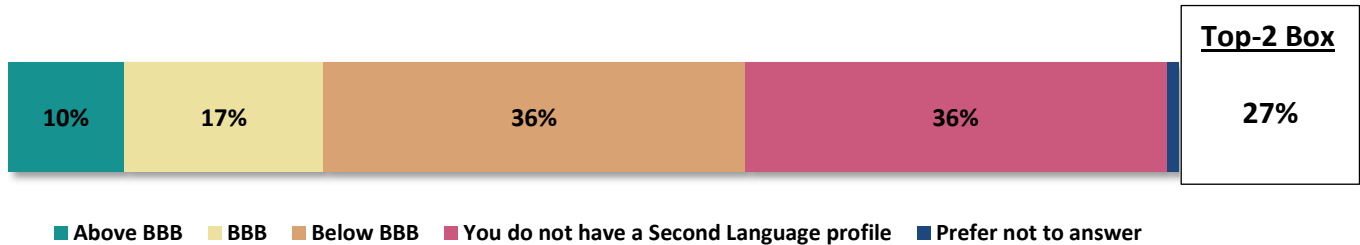
- Respondents living in Quebec compared to those living in Ontario (69% vs 22%).
- Active/retired military engineers when compared to non-military engineers (40% vs 25%).

Respondents in Quebec were more likely to specify that they **could benefit from some English-language training** at work when compared to those living in Ontario (17% vs 1%).

2.12 Second Language Profile

To better understand the perspectives of second language training, respondents were asked to specify their current Second Language profile relative to the BBB level language proficiency. Nearly 1 in 3 respondents (27%) described having a second language profile of BBB or above.

Figure 19 – Current Second Language Profile



Q18. What is your current Second Language profile? Base: All Respondents, n=261.

Over 1 in 3 respondents specified that their second language profile is below a BBB level (36%), and an additional 36% are currently without a second language profile.

Key Segments

Segments more likely than their counterparts to say their current second language profile is a **BBB level or above** include:

- Respondents living in Quebec compared to those living in Ontario (77% vs 49%).
- Engineers with an ENG-05 level or higher compared to those with an ENG-04 level or lower (74% vs 36%).
- Active/retired military engineers compared to non-military engineers (67% vs 45%).
- Engineers who did not identify as a member of an Employment Equity group compared to those who do (61% vs 43%).
- Engineers working in the DGLEPM division compared to those working in the DGMEPM division (59% vs 41%).
- Respondents who have been in the Materiel Group for at least 5 years, compared to those with less than 5 years of experience (58% vs 42%).
- Respondents at least 35 years old compared to younger respondents (56% vs 36%).

Segments more likely than their counterparts to say their current second language profile is **below BBB level** include:

- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (22% vs 5%).
- Respondents living in Ontario compared to those living in Quebec (12% vs 1%).

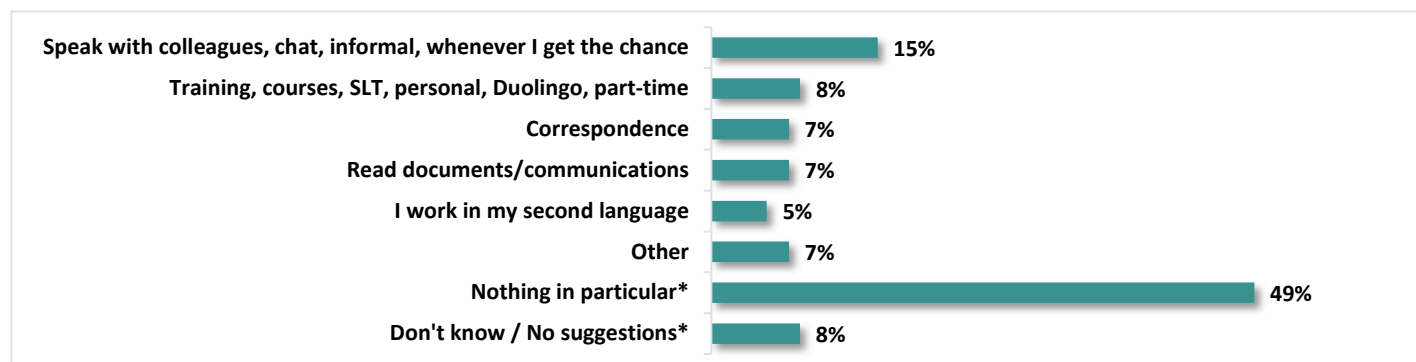
Segments more likely than their counterparts to state they **do not have a second language profile** include:

- Respondents between the age of 18 and 34 years old compared to those 35 years or older (56% vs 32%).
- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (51% vs 17%).
- Respondents stemming from academia prior to joining DND (49%) when compared to those working in the public service (27%) and in the Canadian Armed Forces (22%).
- Engineers sponsored through Materiel Acquisition & Support compared to those without MA&S ODP sponsorship (48% vs 32%).
- Non-military engineers compared to active/retired military engineers (43% vs 23%).
- Respondents whose highest level of education is a bachelor's degree compared to those with a master's or PHD (42% vs 29%).

2.13 Improving Second Language at Work

In addition, respondents were asked what type of activities they undertake at work with the specific objective of improving their ability to communicate in their second language. Over 1 in 10 respondents (15%) specified that they speak with colleagues and communicate in their second language whenever they have the chance.

Figure 20 – Specific Activities at Work to Improve Second Language Communication



<i>Additional Second Language Activities at Work (3% or lower)</i>			
No activities-no time or no perceived need	3%	Presentations	1%
Meetings	3%	Perfectly bilingual	1%
Translate/produce documents/writing	2%	Francophones revert to English when Anglophones are present	1%
Training/ language testing not supported	2%	Google translate (searches)	1%
None/ very little	2%	Miscommunication results when English language not used (with regards to technical elements, standards and jargon)	1%
No opportunity-everything happens in English	2%		

Q19. What types of activities do you do at work with the specific objective of improving your ability to communicate in your second language? Base: All Respondents, n=261. *Response options presented to respondents.

Additional common activities for improving communication in a second language at work include various training efforts such as interactive courses like Duolingo (8%), correspondence (7%), as well as reading documents and various communications (7%).

Half of respondents (49%) specified that they do nothing in particular while at work with the specific objective of improving their ability to communicate in their second language.

Key Segments

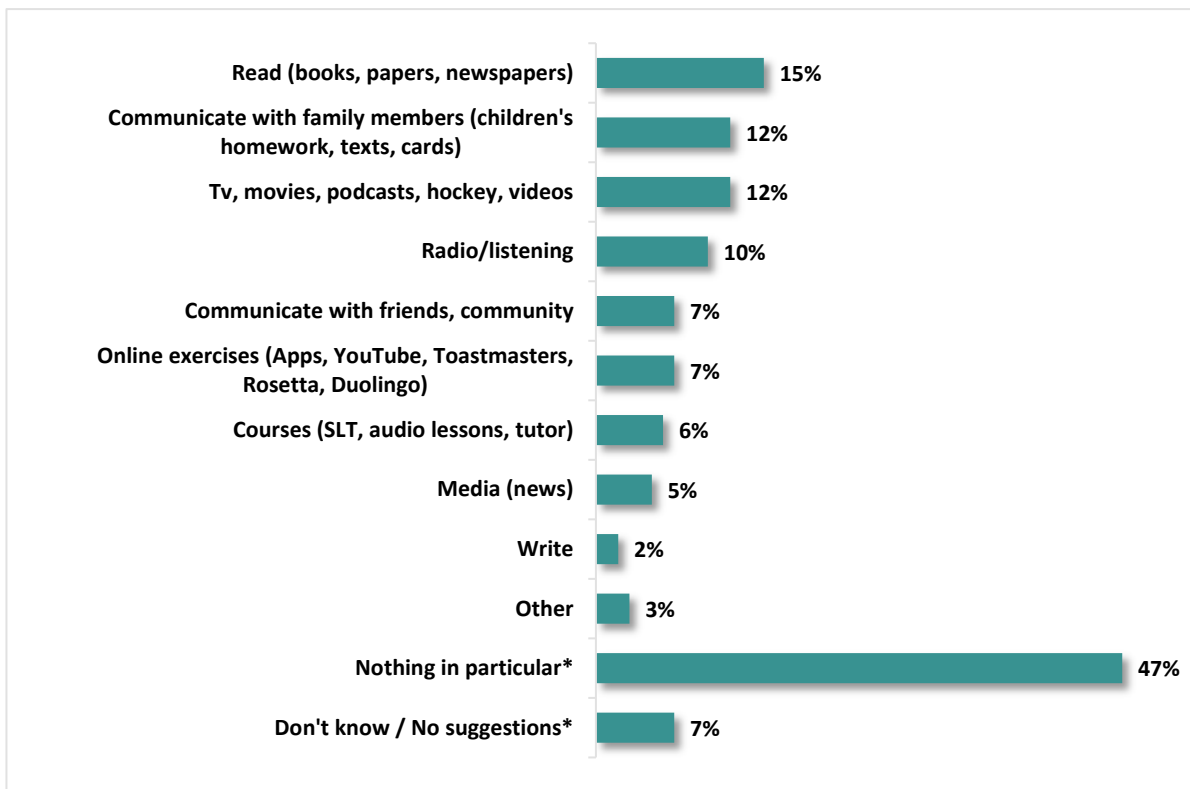
Segments who more commonly specified that they **read documents and various communications** to improve their second language include:

- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (14% vs 3%).

2.14 Improving Second Language Outside of Work

Respondents were also asked what type of activities they undertake outside of work with the specific objective of improving their ability to communicate in their second language. The most common activities included reading (15%), watching video content (e.g. TV, movies, podcasts, etc.) (12%), communicating with family members (12%), and listening to the radio (10%).

Figure 21 – Specific Activities Outside of Work to Improve Second Language Communication



*Q20. What types of activities do you do on your own time (i.e. when you are not at work) with the specific objective of improving your ability to communicate in your second language? Base: All Respondents, n=261. *Response options presented to respondents.*

Nearly 1 in 2 respondents (47%) specified that they do nothing in particular outside of work with the specific objective of improving their ability to communicate in their second language.

Key Segments

Engineers who stem from academia prior to joining DND were more likely to be enrolled in **specialized courses** including SLT, audio lessons or a tutor (14%) when compared to those

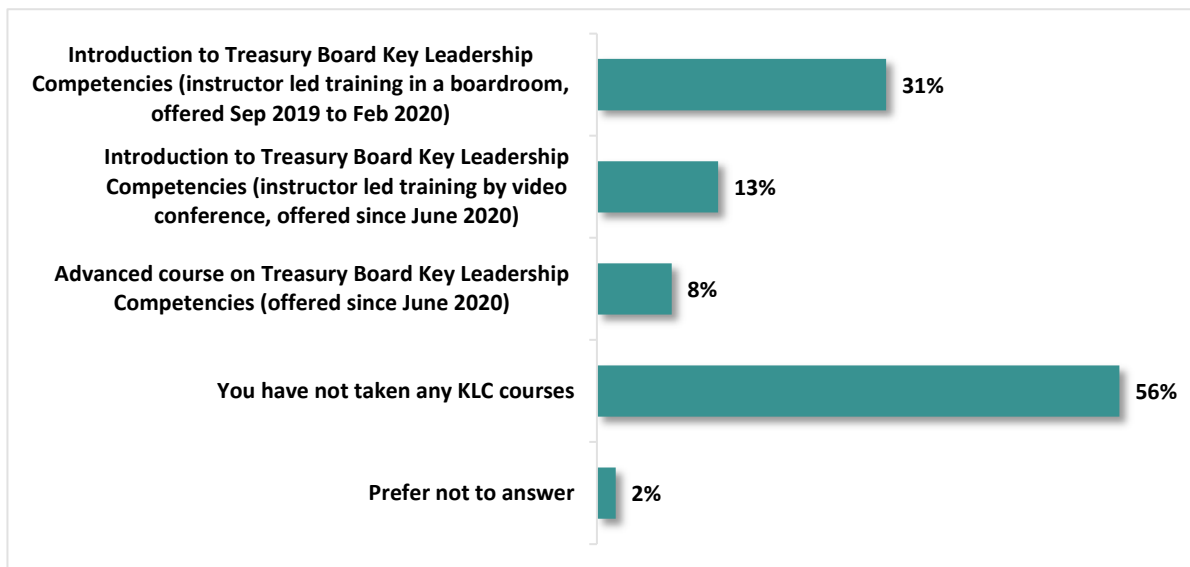
previously working in the public service (2%), the Canadian Armed Forces (3%) and the Defence industry (3%).

Engineers sponsored through Materiel Acquisition & Support were more likely to describe **using online exercises** when compared to those without MA&S ODP sponsorship (14% vs 5%).

2.15 Key Leadership Competencies Courses

To better understand the impact of Key Leadership Competencies (KLC) courses, the survey explored usage, usefulness and opportunities for improvement. In terms of use, 31% took the Introduction to Treasury Board KLC course offered in a boardroom from September 2019 to February 2020.

Figure 22 – Experience with Key Leadership Competencies (KLC) Courses



Q21. Which of the following Key Leadership Competencies (KLC) courses have you taken? (SELECT ALL THAT APPLY) Base: All Respondents, n=261.

More than 1 in 10 respondents (13%) have taken the Introduction to Treasury Board KLC course offered online since June 2020. Nearly 1 in 10 respondents (8%) have taken the Advanced course on Treasury Board Key Leadership Competencies. Over 1 in 2 respondents (56%) specified that they have not taken any of the KLC courses.

Key Segments

Segments attending the **in-person Introduction to KLC course** more than their counterparts include:

- Respondents working in the Regulatory & Technical Specialty engineering domain compared to those in the Materiel Support domain (42% vs 25%).
- Respondents with a master's or PHD compared to those with a bachelor's degree (39% vs 25%).
- Engineers stemming from academia compared to those working in the Canadian Armed Forces prior to joining DND (42% vs 22%).

Engineers who worked in the public service prior to joining DND were more likely to have taken the **online Introduction to KLC course** (25%) when compared to those working in the Defence industry (8%) and those stemming from academia (8%).

Respondents with an ENG-05 level or higher were more likely to have taken the **Advanced KLC course** when compared to those with an ENG-04 level or lower (15% vs 3%).

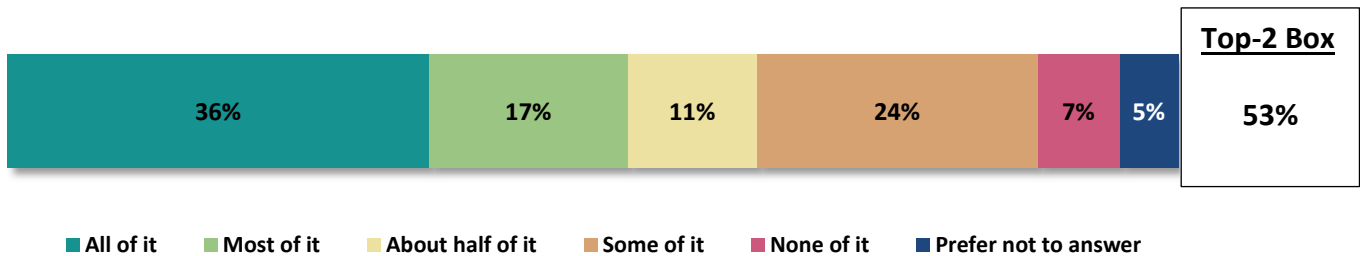
Segments who were more likely to say they **have not taken any** of the KLC courses include:

- Respondents in Quebec when compared with those living in Ontario (67% vs 52%).
- Engineers in the current working division of DGAEPM compared to those in the DGLEPM working division (70% vs 52%).

2.16 Key Leadership Competencies Self-Assessment

Respondents who had taken at least one of the Introduction to Treasury Board Key Leadership Competencies courses were then asked to specify how much of the Self-Assessment they completed while taking the course. Overall, more than 1 in 2 course participants (53%) finished all or most of the Self-Assessment, with 36% indicating they completed it entirely.

Figure 23 – Completion of the Key Leadership Competencies Self-Assessment in the Introduction Level Course



Q22. While taking the Introduction level course, how much of the Key Leadership Competencies Self-Assessment did you complete? Base: Respondents who have taken at least one of the Introduction to Treasury Board Key Leadership Competencies courses, n=107.

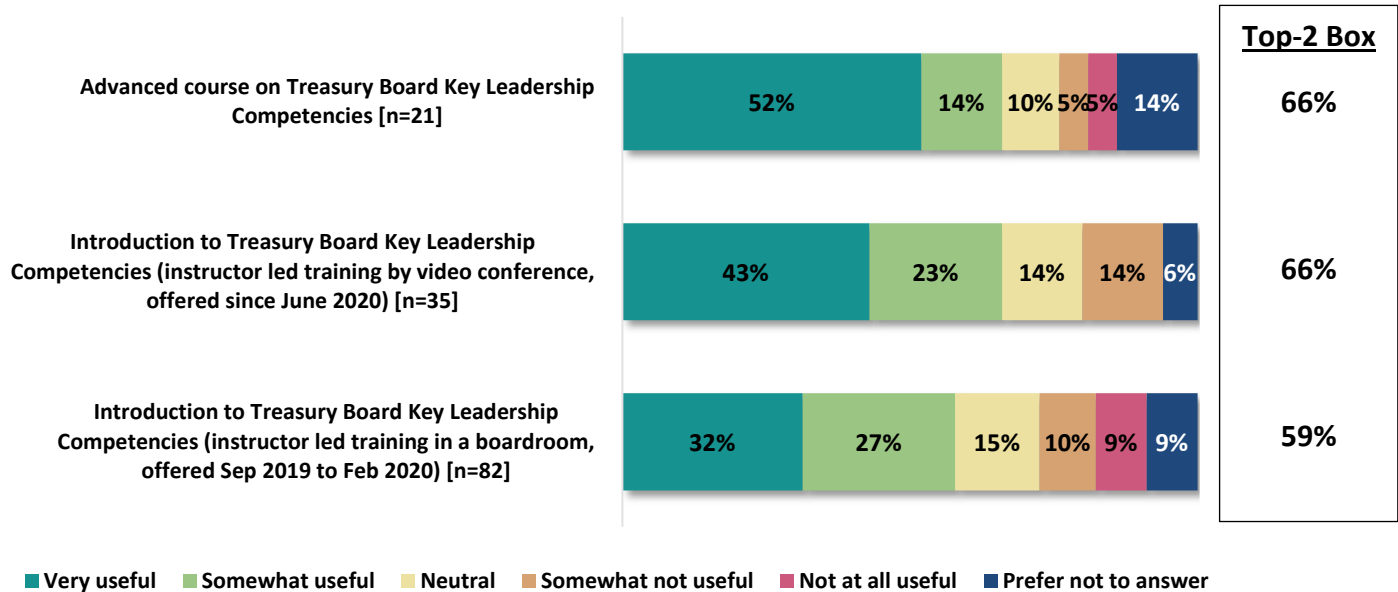
Key Segments

Engineers without sponsorship through Materiel Acquisition & Support were more likely to reported **completing all of the KLC Self-Assessment** when compared to those with an MA&S ODP sponsorship (43% vs 20%).

2.17 Key Leadership Competencies for Competitions

Respondents who have taken at least one Key Leadership Competencies course were asked to indicate the extent to which the course content was useful to prepare them for competitions. Nearly 3 in 5 course participants (59%) felt that each of the KLC courses they had taken were very or somewhat useful to prepare them for competitions.

Figure 24 – Usefulness of KLC Courses Taken to Prepare for Competitions



Q23. Please indicate the extent to which the content of KLC course(s) you have taken has been useful to prepare you for competitions: Base: Respondents who have taken at least one KLC course, n=109.

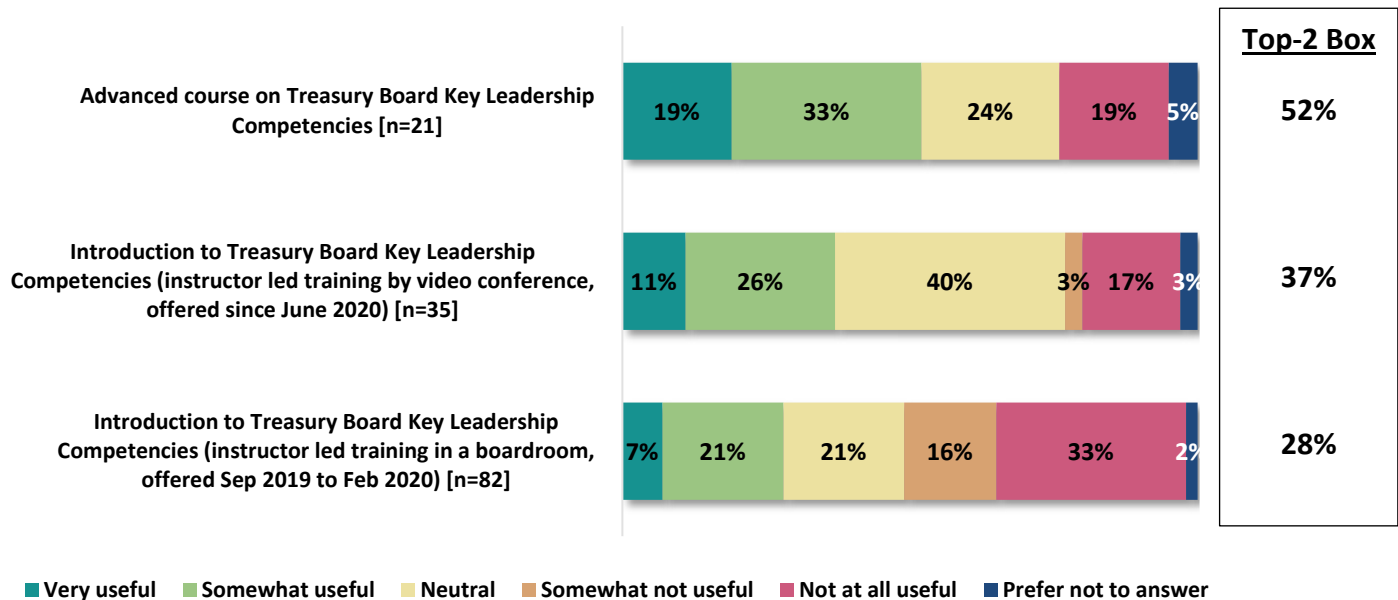
Two thirds of advanced course participants (66%) felt that the course was very or somewhat useful to prepare them for competitions. More than 1 in 2 (52%) felt that the advanced course was very useful for preparing for competitions, the highest among all of the KLC courses.

The Introduction to Treasury Board KLC course was considered very or somewhat useful to prepare for competitions by 2 in 3 respondents (66%) when hosted via video conference, slightly higher than the course previously offered in an in-person boardroom session (59%).

2.18 Usefulness of Key Leadership Competencies Courses

Respondents who have taken at least one Key Leadership Competencies course were asked to indicate the extent to which the course content was useful in their daily work. Overall, nearly 1 in 3 course participants (28%) felt that their respective course was very or somewhat useful in their daily work.

Figure 25 – Usefulness of KLC Courses Taken in Daily Work



Q24. Please indicate the extent to which the content of KLC course(s) you have taken has been useful in your daily work: Base: Respondents who have taken at least one KLC course, n=109.

More than 1 in 2 advance course participants (52%) felt that the content was useful in their daily work, the highest among available KLC courses.

The latest iteration of the Introduction KLC course hosted via video conference received higher rankings of very or somewhat useful for daily work when compared to the Introduction course hosted in an in-person boardroom setting (37% vs 28%).

One in three in-person introduction course participants (33%) felt that the course was not at all useful in their daily work, the least useful of each of the courses offered.

Key Segments

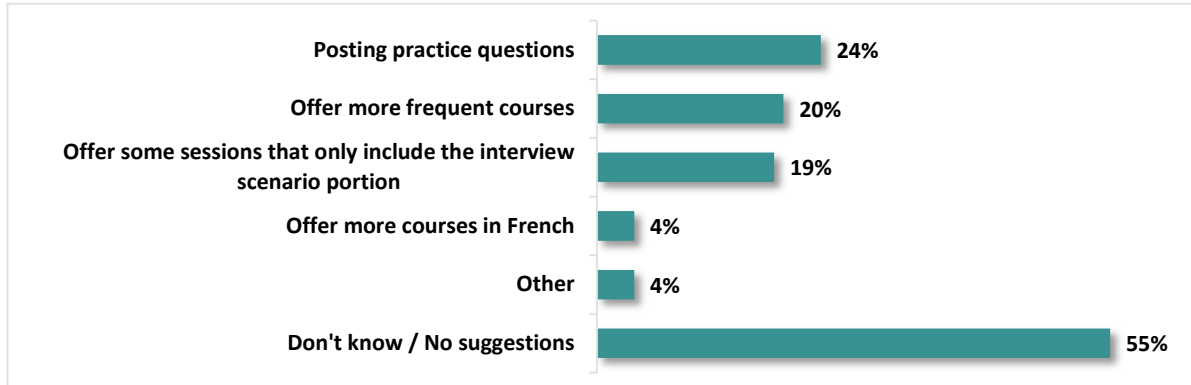
Respondents with an ENG-05 level or higher were more likely to indicate the in-person Introduction to KLC course was very or somewhat useful when compared to those with an ENG-04 level or lower (49% vs 12%).

2.19 Suggestions for Key Leadership Competencies Courses

Respondents were asked to provide suggestions to improve the Key Leadership Competencies courses. Nearly 1 in 4 participants (24%) felt that posting sets of practice questions in order to prepare for testing would be an improvement. One in five respondents (20%) felt that an increased frequency in conducting KLC courses would be an improvement over the current

format, while nearly 1 in 5 respondents (19%) would request that sessions be made available focusing exclusively on the interview scenario.

Figure 26 – Suggestions to Improve KLC Courses



<i>Additional Responses for Improving KLC Courses</i> (3% or lower)			
More specific sample scenarios and questions (update the examples regularly)	2%	Specific material (DND, ADM(Mat))	2%
Practical skills, based on the code of ethics, for daily life vs for promotion	2%	Didn't know that they exist	1%
More visible/Advertise/Communicate better when the courses will be held.	2%	Alternate formats (asynchronous learning, group case studies)	1%
Example answers that are good-neutral-bad	2%	Supported by a cadre of instructors/coach	1%
Not useful/Not sure how and if it helps	2%		

Q25. Do you have any suggestions to improve the KLC courses? (MULTIPLE MENTION) Base: All Respondents, n=261.

Additional suggestions were focused on specific examples or skills for practice questions, as well as communication of the existence and schedule of the KLC courses, as a few were not aware of the existence or benefits of the courses offered. Over 1 in 2 respondents (55%) offered no suggestions for improvement to the KLC courses that are currently offered.

Key Segments

Engineers who identified themselves as a member of an Employment Equity group were more likely to specify that they would like to see the following improvements to KLC courses compared to those who did not:

- Posting practice questions (35% vs 18%).
- Offer more frequent courses (29% vs 12%).
- Offer some sessions that only include the interview scenario portion (27% vs 14%).

More specifically, engineers identifying as a visible minority were more likely to specify that they would like to see the following improvements to KLC courses compared to those who do not belong to any Employment Equity group:

- Posting practice questions (41% vs 18%).
- Offer more frequent courses (40% vs 12%).
- Offer some sessions that only include the interview scenario portion (33% vs 14%).

Segments who were more likely to mention **offering more frequent courses** include:

- Engineers identifying themselves as a visible minority compared to those who identify as a member of another Employment Equity group (40% vs 17%).
- Respondents who were working in the Canadian Armed Forces or stemmed from academia prior to joining DND compared to those working in the Defence industry (22% respectively vs 8%).

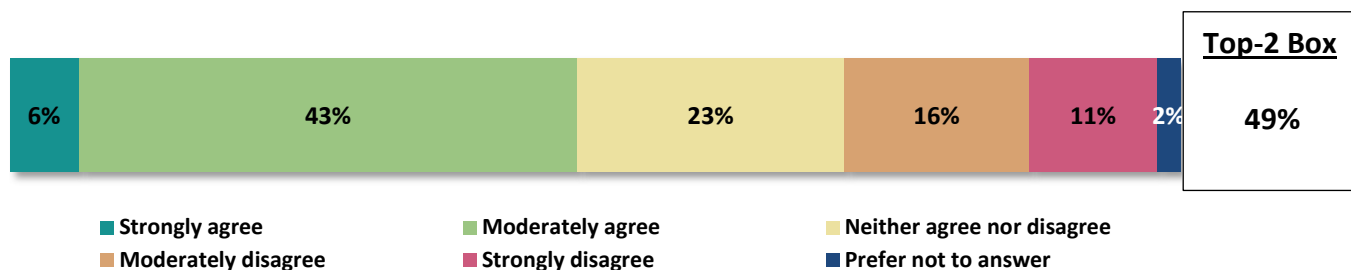
2.20 Training Opportunities for Career Development

As an overall assessment of the training opportunities available for career development, respondents were asked to state their level of agreement with the following statement:

Considering all the training opportunities available to you through DND, you believe the training lists fully cover your needs for career development.

Nearly 1 in 2 respondents (49%) strongly or moderately agreed that the current training opportunities available through DND fully cover their needs for career development. Over 2 in 5 respondents (43%) moderately agreed, with 6% feeling that their needs were completely met by existing opportunities.

Figure 27 – Agreement with Training Opportunities Covering Career Development Needs



Q26. To what extent do you agree or disagree with the following statement: *Considering all the training opportunities available to you through DND, you believe the training lists fully cover your needs for career development.* Base: All Respondents, n=261.

In contrast, over 1 in 4 respondents (26%) moderately or strongly disagree that their career development needs are being met by the current training opportunities available through DND.

Key Segments

Segments that were more likely to strongly or somewhat agree that their career development needs are being met include:

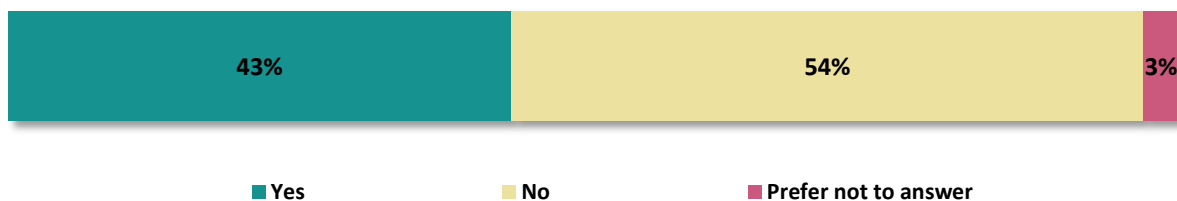
- Respondents stemming from academia prior to joining DND (66%) compared to those coming from the public service (45%) and the Defence industry (34%).
- Engineers who do not identify as a member of an Employment Equity group compared to those who identify as members of an EE group other than visible minorities (54% vs 36%).

3. Post-Grad Education Support

3.1 Considerations for a Post Graduate Degree

Over 2 in 5 respondents (43%) have considered doing a Post Graduate degree while working in the Materiel Group.

Figure 28 – Consideration of Completing a Post Graduate Degree While Working in the Materiel Group



Q27. While working in the Materiel Group, have you considered doing a Post Graduate degree? Base: All Respondents, n=261.

Key Segments

Engineers with sponsorship through Materiel Acquisition & Support were more likely to have considered a Post Graduate degree while working in the Materiel Group when compared to those without an MA&S ODP sponsorship (62% vs 38%).

Respondents 18 to 34 years old (58%) and those 35 to 54 years old (48%) were more likely to have considered a Post Graduate degree while working in the Materiel Group when compared to those 55 years or older (23%).

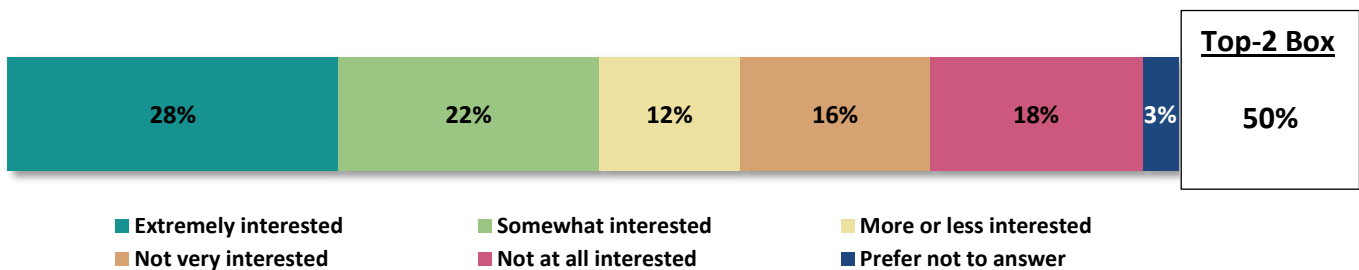
3.2 Post-Grad Programs for Technical Expertise

Respondents were asked to state their level of interest in highly technical post-grad programs based on the following statement:

At DND, individuals can apply for and work towards various post-grad certifications, qualifications and professional designations. If DND were to further develop post-grad programs that would allow individuals to obtain highly technical expertise in areas such as Guided Weapons, Military Radar, Ballistics, etc., how interested would you be in pursuing that form of post-grad education?

One in two respondents (50%) were extremely or somewhat interested in the prospect of post-grad programs developed through DND targeting highly technical expertise, with 28% extremely interested.

Figure 29 – Interest in Pursuing Post-Grad Education to Obtain Highly Technical Expertise



Q28. At DND, individuals can apply for and work towards various post-grad certifications, qualifications and professional designations. If DND were to further develop post-grad programs that would allow individuals to obtain highly technical expertise in areas such as Guided Weapons, Military Radar, Ballistics, etc., how interested would you be in pursuing that form of post-grad education? Base: All Respondents, n=261.

Key Segments

Respondents with an ENG-04 level or lower were more likely to be extremely or somewhat interested in highly technical post-grad programs when compared to those with an ENG-05 level or higher (59% vs 41%).

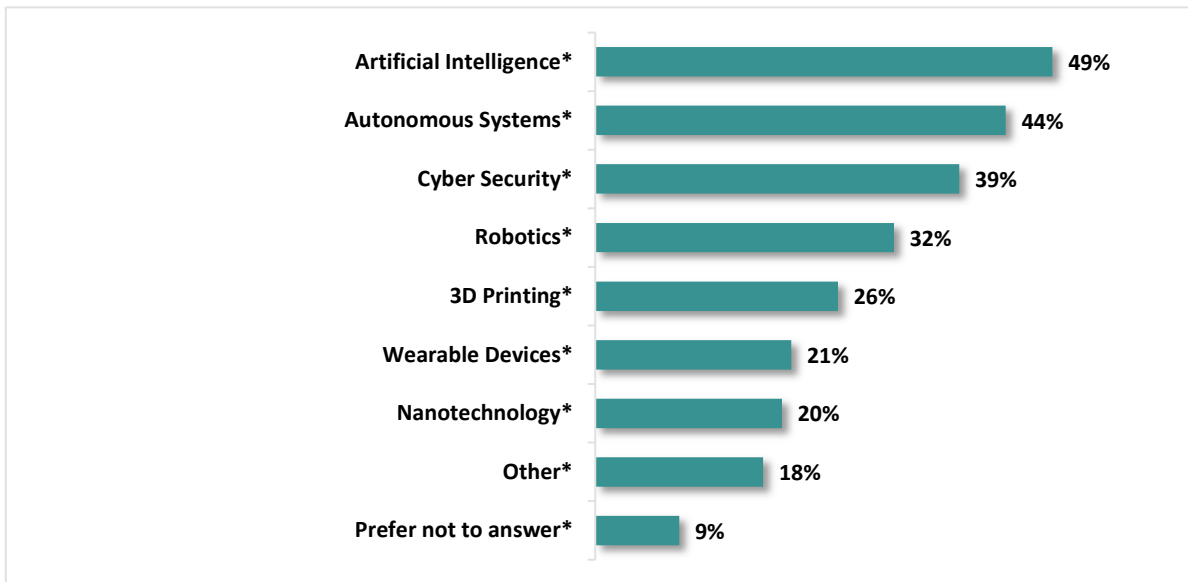
Engineers currently working in the Regulatory & Technical Specialty (38%) or Materiel Acquisition (33%) domains were more likely to be *extremely* interested in highly technical post-grad programs when compared to those working in Materiel Support domain (18%).

3.3 Areas of Study for Technical Expertise

Respondents who were extremely or somewhat interested in pursuing a post-grad program to obtain highly technical experience were asked to specify which areas they would most want to study. Nearly 1 in 2 interested respondents were focused on system-based technologies such as artificial intelligence (49%), autonomous systems (44%) and cyber security (39%).

The next most popular topics included robotics (32%), 3D printing (26%), wearable devices (21%) and nanotechnologies (20%).

Figure 30 – Interest in Highly Technical Areas of Study



Additional Interests in Highly Technical Areas of Study			
<i>(3% or lower)</i>			
Ammunition	3%	Radar	2%
Aerospace, Avionics	3%	Infrared	2%
Simulation (modelling, design, trainers)	3%	Marine, ship	2%
Armament/weapons	2%	System safety	2%
Explosives	2%	Acoustics	2%
Military vehicles (design, technology)	2%	Remote weapon system	2%
Ballistics/missile systems	2%	Software	1%

Q29. What highly technical area(s) would you most want to study? (MULTIPLE MENTION) Base: Respondents who were “extremely” or “somewhat interested” in pursuing post-grad programs to obtain highly technical expertise, n=131. *Response options presented to respondents.

Key Segments

Engineers with a greater tendency to be interested in **Artificial Intelligence** as an area of study compared to their counterparts include:

- Respondents working in Materiel Acquisition compared to those working in the Regulatory & Technical Specialty domain (57% vs 36%).
- Engineers having been at their current level less than 5 years compared to those with more experience (55% vs 37%).

Engineers working in Materiel Acquisition were more likely to say they are interested in **Autonomous Systems** compared to those working in Materiel Support (56% vs 30%).

Engineers identifying as a visible minority were more commonly interested in **Cyber Security** as an area of study compared to those who do not belong to any Employment Equity group (53% vs 31%).

Engineers working in Materiel Acquisition were more likely to be interested in **Robotics** compared to those working Materiel Support or Regulatory & Technical Specialty (44% vs 19%).

Engineers with a greater tendency to be interested in **Wearable Devices** as an area of study include:

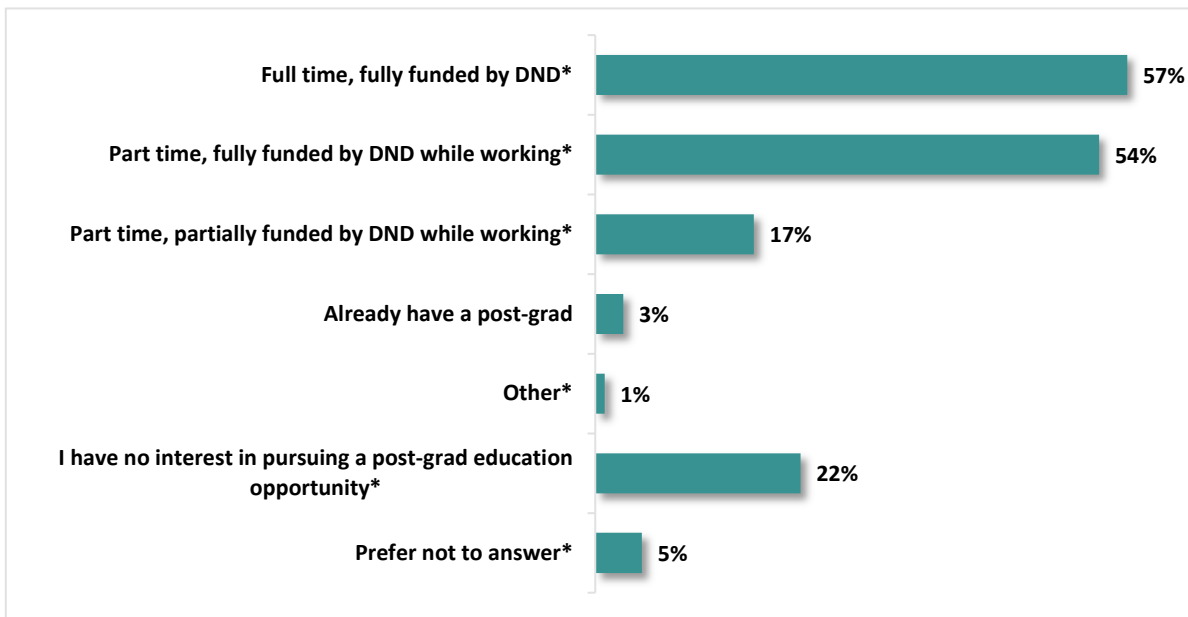
- Women compared to men (50% vs 16%).
- Engineers who identify as a member of an Employment Equity group other than visible minorities compared to those that are not a member of any EE group (46% vs 15%).

Non-military engineers were more likely to be interested in **Nanotechnology** when compared to active/retired military engineers (25% vs 10%).

3.4 Funding Options for Post-Grad Education

Respondents were presented with a list of funding option conditions in order to consider pursuing a post-grad education opportunity while working in the Materiel Group. Nearly 3 in 5 respondents would be prepared to accept a full time, fully funded scenario (57%) and 54% would be open to a part time approach that was fully funded by DND while continuing to work. The least popular option involved studying part time with the program partially funded while working.

Figure 31 – Funding Options to Consider Pursuing a Post-Grad Education Opportunity



*Q30. We would like to understand the conditions that would need to be met for you to consider pursuing a post-grad education opportunity while working in the Materiel Group. For starters, different funding options are listed below. Please select all the ones you would be prepared to accept. (MULTIPLE MENTION) Base: All Respondents, n=261. *Response options presented to respondents.*

More than 1 in 5 respondents (22%) have no interest in pursuing a post-grad education opportunity regardless of any conditions met by DND.

Key Segments

Segments with a greater tendency than their counterparts to specify they would be interested in the **full time, fully funded by DND** approach include:

- Respondents 18 to 34 years old (89%) compared to those 35 to 54 years old (61%) or 55 years and older (32%).
- Engineers with sponsorship through Materiel Acquisition & Support compared to those without an MA&S ODP sponsorship (83% vs 49%).
- Engineers stemming from academia (71%) compared to those working in the Canadian Armed Forces (53%) or the Defence industry (50%) prior to joining DND.

- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (64% vs 50%).

Segments with a greater tendency than their counterparts to specify they would be interested in the **part time, fully funded by DND** approach include:

- Engineers with sponsorship through Materiel Acquisition & Support compared to those without an MA&S ODP sponsorship (68% vs 49%).
- Engineers stemming from academia compared to those working in the Canadian Armed Forces (64% vs 45%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (61% vs 48%).
- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (60% vs 45%).

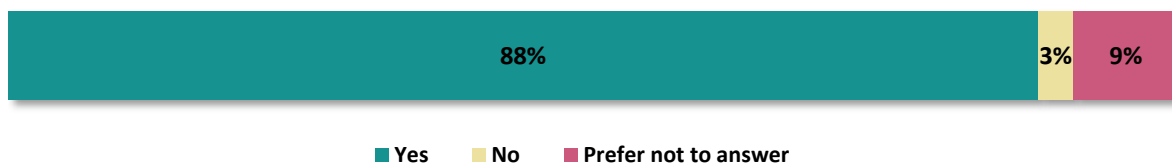
3.5 Duration of Work in Exchange for Funding

Respondents who selected at least one potential funding option were presented with the following scenario in exchange for funding of a post-grad education while working in the Materiel Group:

Working in the Materiel Group for twice the number of months or years as it took you to complete the program (e.g. if it took you 1 year to complete the program, you would commit to working in the Materiel Group for at least 2 years after you graduate)? Please note that it does not preclude your accepting a promotion should one be offered to you.

Nearly 9 in 10 interested respondents (88%) would accept this scenario.

Figure 32 – Willingness to Work in the Materiel Group for Twice the Amount of Time Needed to Complete the Program



Q31. Once you graduate, would you be willing to commit to the following in exchange for the funding: working in the Materiel Group for twice the number of months or years as it took you to complete the program (e.g. if it took you 1 year to complete the program, you would commit to working in the Materiel Group for at least 2 years after you graduate)? Please note that it does not preclude your accepting a promotion should one be offered to you. Base: Respondents who selected at least one potential funding option, n=204.

Key Segments

Segments more likely to be interested in the proposed scenario include:

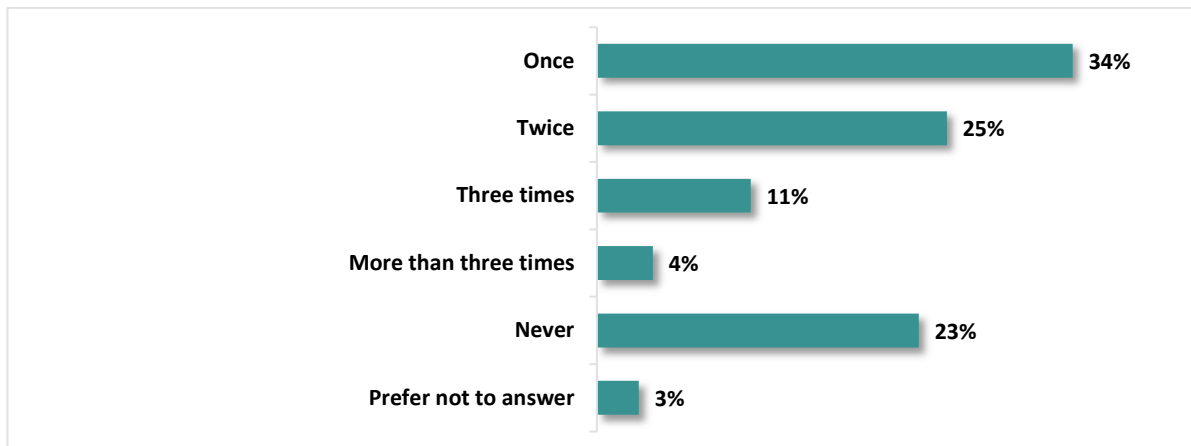
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (98% vs 84%).
- Engineers with sponsorship through Materiel Acquisition & Support compared to those without an MA&S ODP sponsorship (95% vs 85%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (93% vs 84%).
- Respondents with a bachelor's degree compared to those with a master's degree/PHD (93% vs 82%).
- Engineers having been at their current level for less than 5 years compared to those with more experience (93% vs 81%).

4. Promotion Opportunities

4.1 Staffing Process Applications

Respondents were asked to specify how many times they have applied to an ENG-05 / ENG-06 staffing process in the Materiel Group. More than 1 in 3 respondents (34%) applied once to an ENG-05 / ENG-06 staffing process, while 25% have previously applied twice, and 11% previously applied 3 times.

Figure 33 – Applications to the ENG-05 / ENG-06 Staffing Process in the Materiel Group



Q32. How many times have you applied to an ENG-05 / ENG-06 staffing process in the Materiel Group? Base: All Respondents, n=261.

Nearly 1 in 4 respondents (23%) have never applied to an ENG-05 / ENG-06 staffing process in the Materiel Group.

Key Segments

Perhaps not surprisingly, the older respondents are and the longer they have been in the Materiel Group, the more times they have applied to an ENG-05 / ENG-06 staffing process in the Materiel Group. More specifically:

- Respondents 18 to 34 years old are more likely to have **never** applied to an ENG-05 / ENG-06 staffing process in the Materiel Group (69%) compared to older respondents (15%); while the latter are more likely than the former to have applied **once** (37% vs 19%), or **twice** (27% vs 11%).
- Respondents who have been in the Materiel Group for less than 5 years are more likely to have **never** applied compared to those who have been for at least 5 years (49% vs 10%), while the latter are more likely to have applied **at least twice** (53% vs 13%).

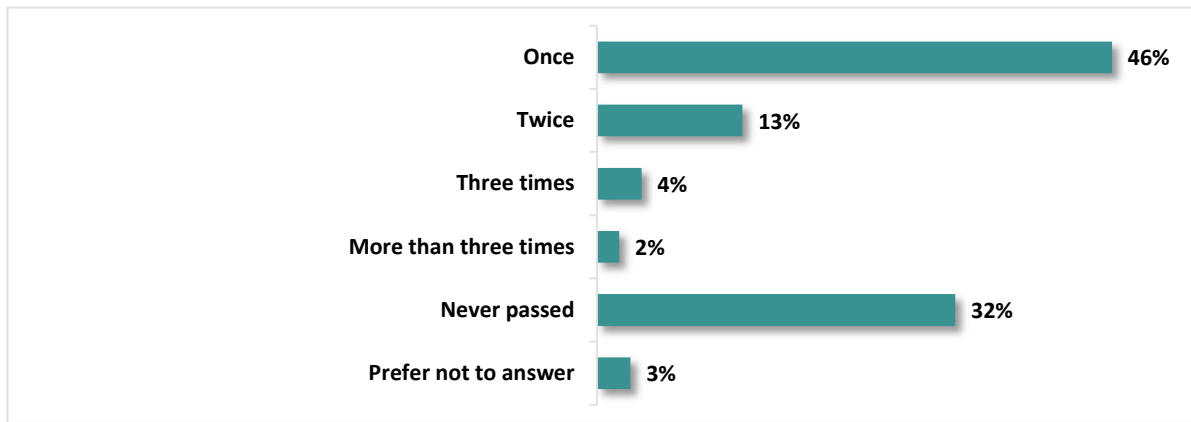
Segments that are more likely to have **never** applied to an ENG-05 / ENG-06 staffing process in the Materiel Group include:

- Engineers with sponsorship through Materiel Acquisition & Support to those without an MA&S ODP sponsorship (44% vs 16%).
- Respondents working in the public service (34%) or stemming from academia (31%) compared to those working in the Defence industry (13%) prior to joining DND.
- Non-military engineers compared to active/retired military engineers (29% vs 12%).

4.2 Successful Staffing Process Applications

Among respondents having previously applied to an ENG-05 / ENG-06 staffing process in the Materiel Group, 46% have passed the staffing process once, 13% have passed twice, and 6% have passed three or more times while 32% have never passed.

Figure 34 – Number of Times Passing ENG-05 / ENG-06 Staffing Process in the Materiel Group



Q33. How many times have you passed an ENG-05 / ENG-06 staffing process in the Materiel Group? Base: Respondents who have applied to an ENG-05 / ENG-06 process in the Materiel Group at least once, n=193.

Key Segments

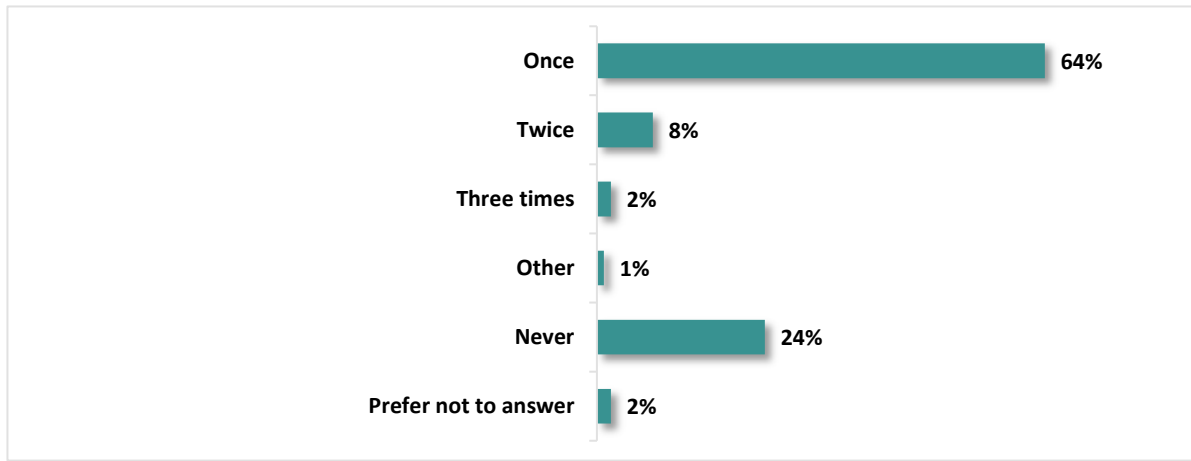
Segments more likely to say they have never passed an ENG-05 / ENG-06 staffing process compared to their counterparts include:

- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (59% vs 11%).
- Engineers identifying themselves as a visible minority compared to those who do not belong to any Employment Equity group (45% vs 27%).
- Non-military engineers compared to active/retired military engineers (38% vs 24%).

4.3 Promotion through Staffing Process

Respondents who had previously passed an ENG-05 / ENG-06 process in the Materiel Group were asked how many times they had been promoted or selected for a position through the ENG-05 / ENG-06 staffing process. Nearly 2 in 3 successful applicants (64%) were promoted or selected for a position once in the Materiel Group whereas 24% have never been promoted or selected.

Figure 35 – Number of Times Promoted to or Selected for a Position through an ENG-05 / ENG-06 Staffing Process



Q34. How many times have you been promoted to or selected for a position through an ENG-05 / ENG-06 staffing process? Base: Respondents who have passed an ENG-05 / ENG-06 process in the Materiel Group at least once, n=126.

Key Segments

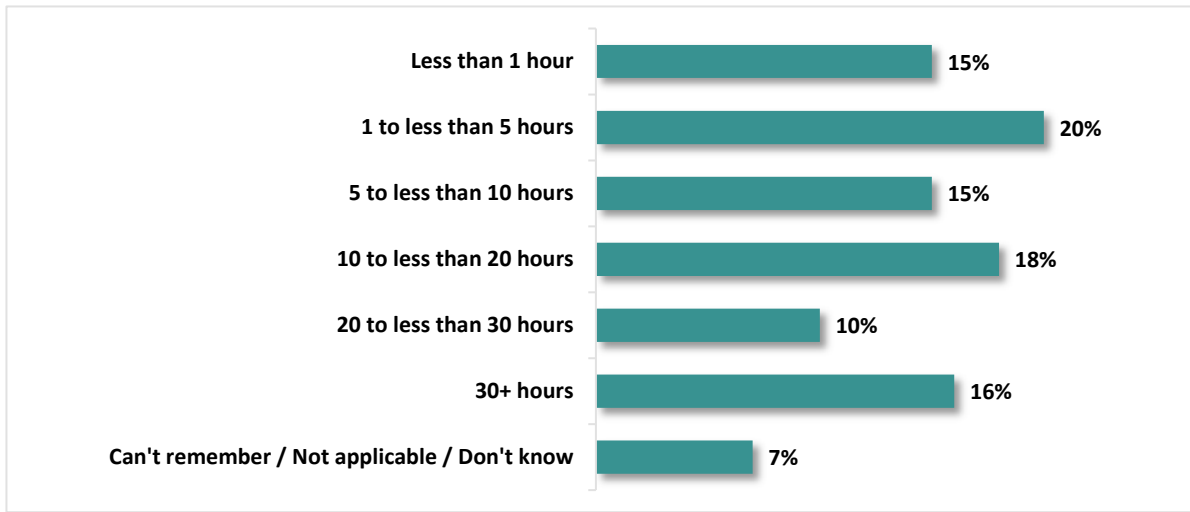
Segments with a greater tendency than their counterparts to report having been promoted to or selected for a position a single time through an ENG-05/ENG-06 staffing process include:

- Respondents with an ENG-05 level or higher compared to those with an ENG-04 level or lower (84% vs 9%).
- Engineers having been at their current level for less than 5 years compared to those with more experience (76% vs 49%).
- Respondents currently working in the DGLEPM division compared to those working in the DGMEPM division. (74% vs 48%).

4.4 Written Exam Preparation

Respondents who had previously applied to an ENG-05 / ENG-06 process in the Materiel Group were asked how many hours they typically spent preparing for an ENG-05 / ENG-06 staffing process written exam. Half of all respondents indicated preparing for 10 hours or less, 18% prepared for 10 to 20 hours and 26% indicated preparing for over 20 hours. The average across all respondents was 15 hours.

Figure 36 – Number of Hours Preparing for an ENG-05 / ENG-06 Staffing Process Written Exam



Q35. Typically, how many hours do you spend preparing for an ENG-05 / ENG-06 staffing process written exam? Base: Respondents who have applied to an ENG-05 / ENG-06 process in the Materiel Group at least once, n=193.

Key Segments

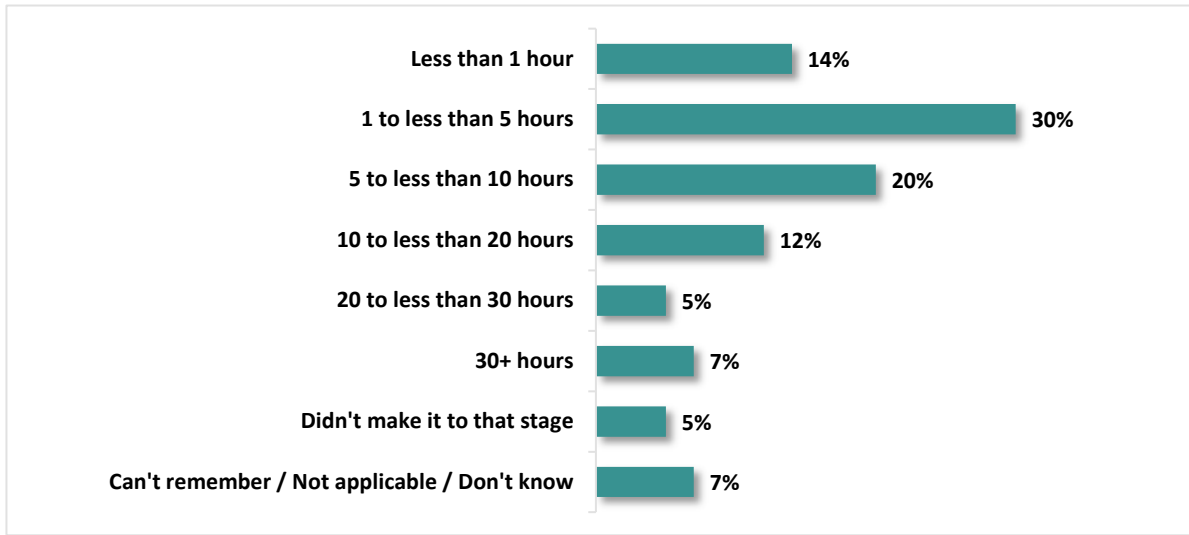
Segments which generally spent a higher average time preparing for an ENG-05 / ENG-06 staffing process **written exam** include:

- Engineers currently working in the DGLEPM division compared to those working in the DGMEPM division (16.6 hours vs 9.0 hours).
- Engineers who previously worked in the Defence industry compared to those working in the Canadian Armed Forces prior to joining DND (23.0 hours vs 11.7 hours).

4.5 Interview Preparation

Respondents who had previously applied to an ENG-05 / ENG-06 process in the Materiel Group were asked how many hours they typically spent preparing for an ENG-05 / ENG-06 staffing process interview. Nearly two-thirds prepared for 10 hours or less (64%). The average across all respondents was 10 hours.

Figure 37 – Number of Hours Preparing for an ENG-05 / ENG-06 Staffing Process Interview



Q36. Typically, how many hours do you spend preparing for an ENG-05 / ENG-06 staffing process interview? Base: Respondents who have applied to an ENG-05 / ENG-06 process in the Materiel Group at least once, n=193.

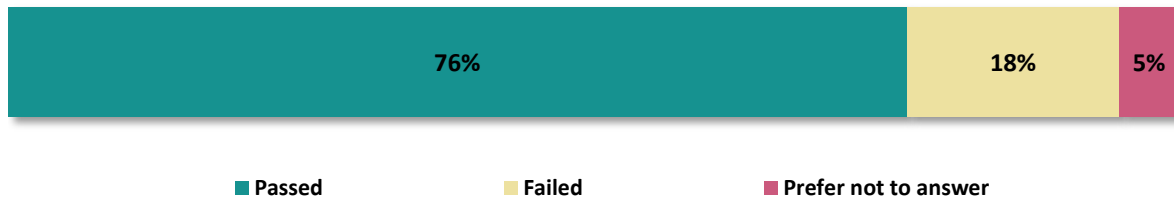
Segments which generally spent a higher average time preparing for an ENG-05 / ENG-06 staffing process **interview** include:

- Engineers working in the DGLEPM division (11.9 hours) compared to those working in the DGMEPM (4.7 hours) or DGAEPM division (5.2 hours).
- Engineers working in the Defence industry prior to joining DND (21.5 hours) compared to those working in the Canadian Armed Forces (4.8 hours).
- Engineers identifying as a visible minority compared to those who do not belong to any Employment Equity group (19.8 hours vs 6.8 hours).

4.6 Latest Application Result

Respondents who had previously passed an ENG-05 / ENG-06 process in the Materiel Group were asked to specify the result of their latest application to the ENG-05 / ENG-06 staffing process. Over 3 in 4 previously successful respondents (76%) passed the last time they applied to the staffing process.

Figure 38 – Result of Latest Application to the ENG-05 / ENG-06 Staffing Process



Q37. Did you pass or fail the last time you applied to the ENG-05 / ENG-06 staffing process? Base: Respondents who have passed at least one ENG-05 / ENG-06 process in the Materiel Group, n=131.

Key Segments

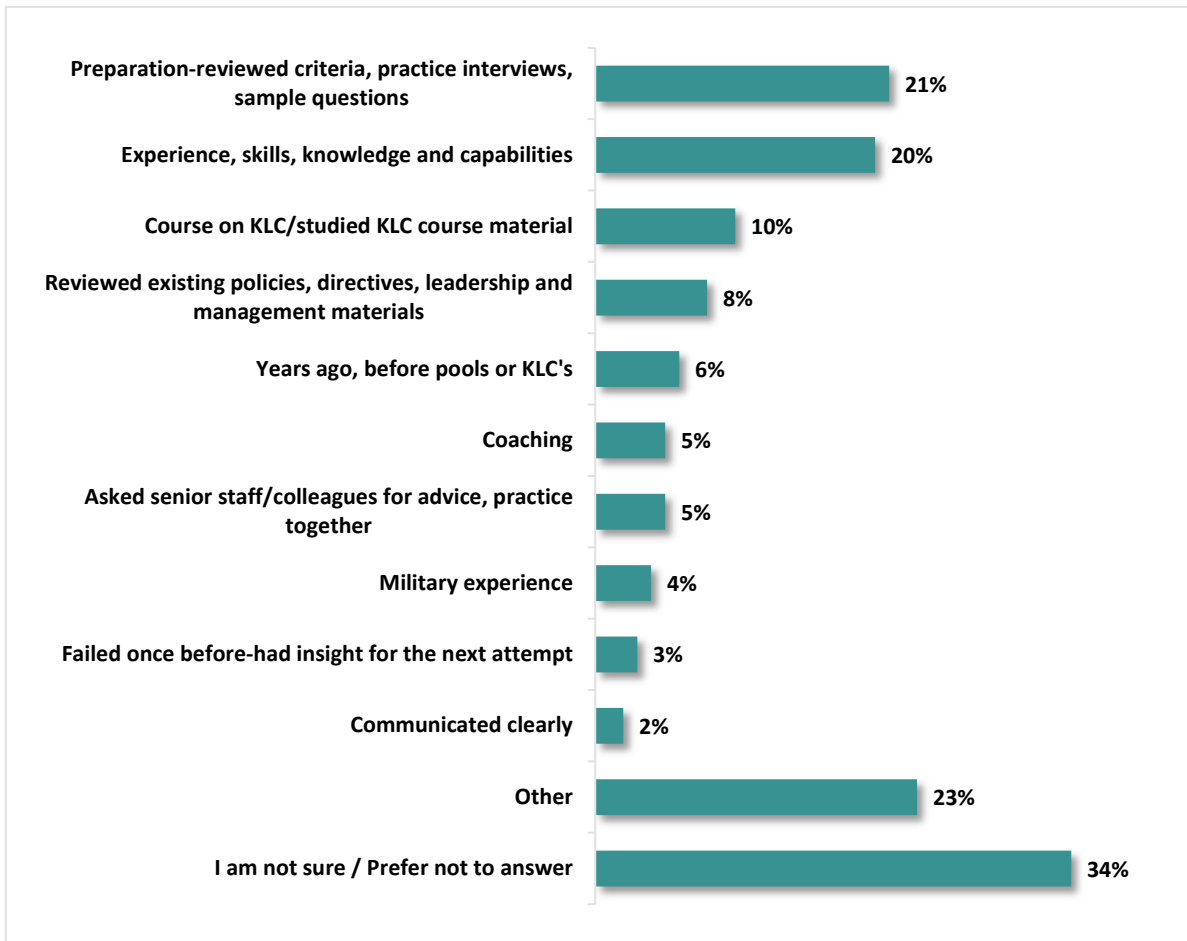
Respondents with an ENG-04 level or lower were more likely to indicate they failed the last time they applied when compared to those with an ENG-05 level or higher (33% vs 12%).

4.7 Reasons for a Successful Application

Respondents who had passed their latest application to an ENG-05 / ENG-06 process in the Materiel Group were asked to describe why they believed they were successful, providing specific details regarding steps taken, information accessed and overall preparations for the staffing process.

More than 1 in 5 successful applicants attributed their success to their preparations and practice of interviews or sample questions (21%) while 20% attributed their success to their level of experience. One in ten successful applicants (10%) attributed their success to the Key Leadership Competencies course and studying the course material. Similarly, nearly 1 in 10 successful applicants (8%) attributed their success to reviewing available directives and materials.

Figure 39 – Perceived Reasons for Passing Latest ENG-05 / ENG-06 Staffing Process



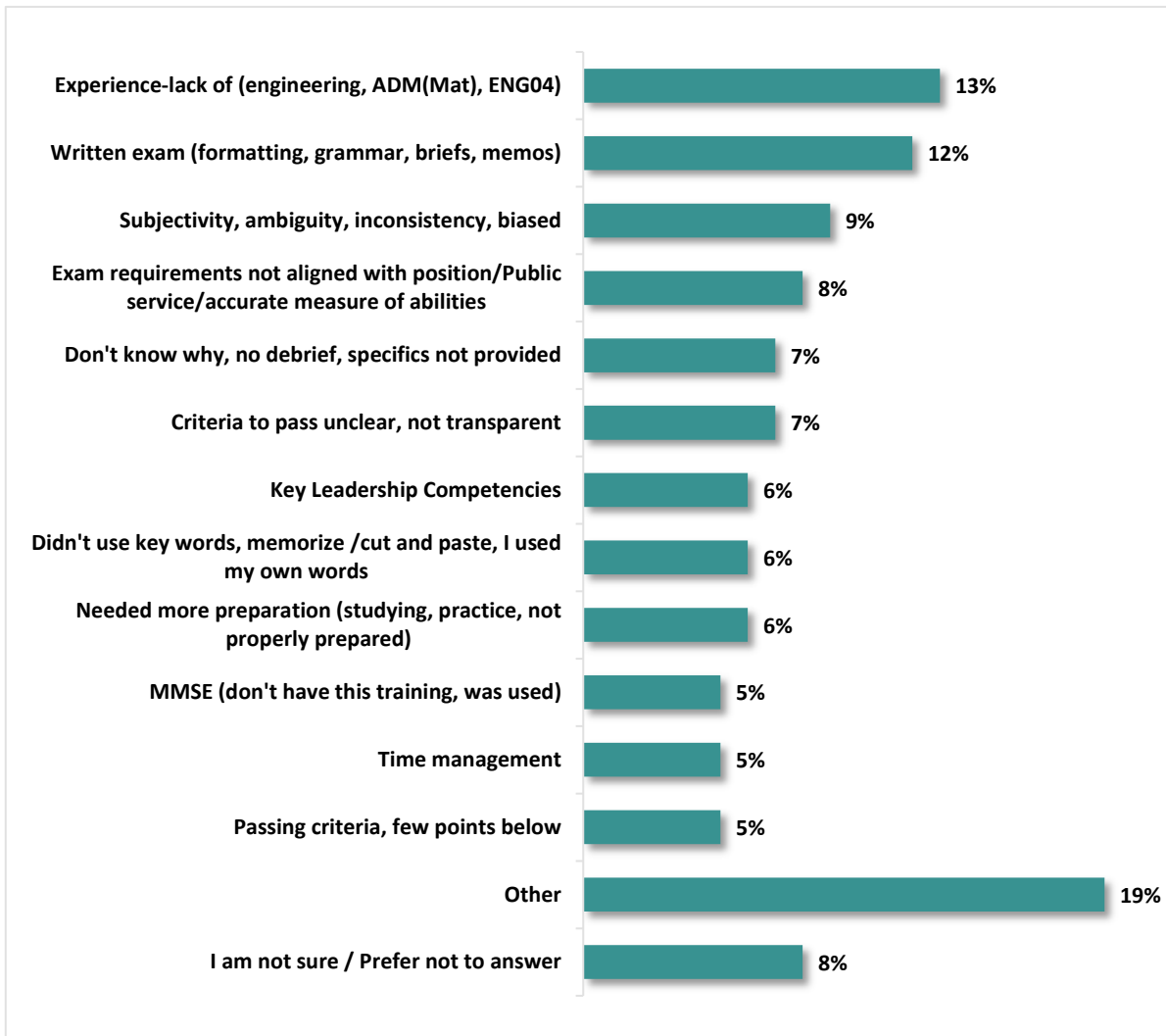
Q38. Why do you think that you passed the latest ENG-05 / ENG-06 staffing process to which you applied? Please give specific details regarding perhaps some of the steps you followed, the information to which you had access, how you prepared, etc. Base: Respondents who passed their latest application to the ENG-05 / ENG-06 staffing process, n=100.

4.8 Reasons for an Unsuccessful Application

Respondents who failed their latest application to an ENG-05 / ENG-06 process in the Materiel Group were asked to provide specific factors that they felt could have improved their outcome. Over 1 in 10 believe a lack of experience (13%) was a contributing factor and 12% believe the written exam was a factor.

Participants also expressed concerns with the subjective and biased nature of the process (9%), and that the exam requirements did not align with the position or that the exam was not an accurate measure of abilities (8%). Some also felt that the criteria to pass were not clearly communicated (7%) while others are not even sure why they did not pass since no debrief was provided (7%). The range of other reasons is provided in the graph and data table below.

Figure 40 – Perceived Reasons for Failing Latest ENG-05 / ENG-06 Staffing Process



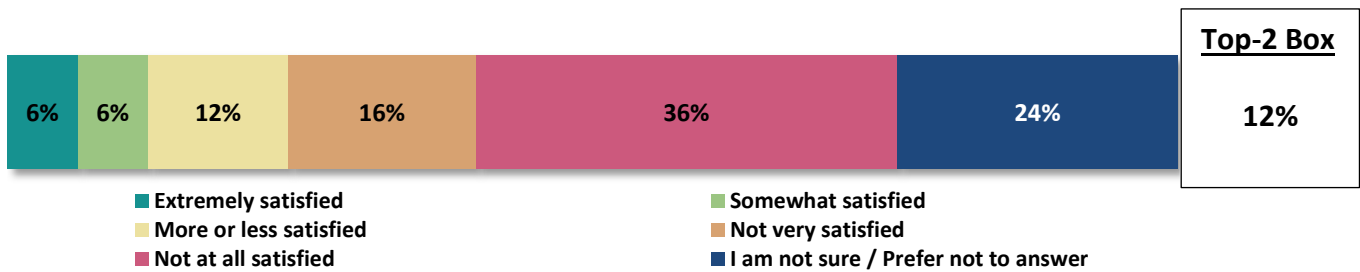
Additional Reasons for Failing Latest Application			
<i>3% or lower</i>			
Focused on HR experience not technical expertise	3%	Misinterpreted the question/priorities	2%
Don't have military background	2%	New to the department	2%
Resume was rejected (cover page)	2%		

Q39. Why do you think that you failed the latest ENG-05 / ENG-06 staffing process to which you applied? Please give specific details regarding factors that you feel could have improved your outcome. Base: Respondents who failed their latest application to the ENG-05 / ENG-06 staffing process, n=86.

4.9 Feedback during Informal Discussion

Respondents who had failed their latest application to an ENG-05 / ENG-06 process in the Materiel Group were asked to provide their level of satisfaction with the feedback that they had received during the Informal Discussion. Over 1 in 2 failing applicants (52%) were not very or not at all satisfied with the feedback they received during the informal discussion.

Figure 41 – Satisfaction with Feedback during the Informal Discussion After Failing Most Recent ENG-05 / ENG-06 Staffing Process



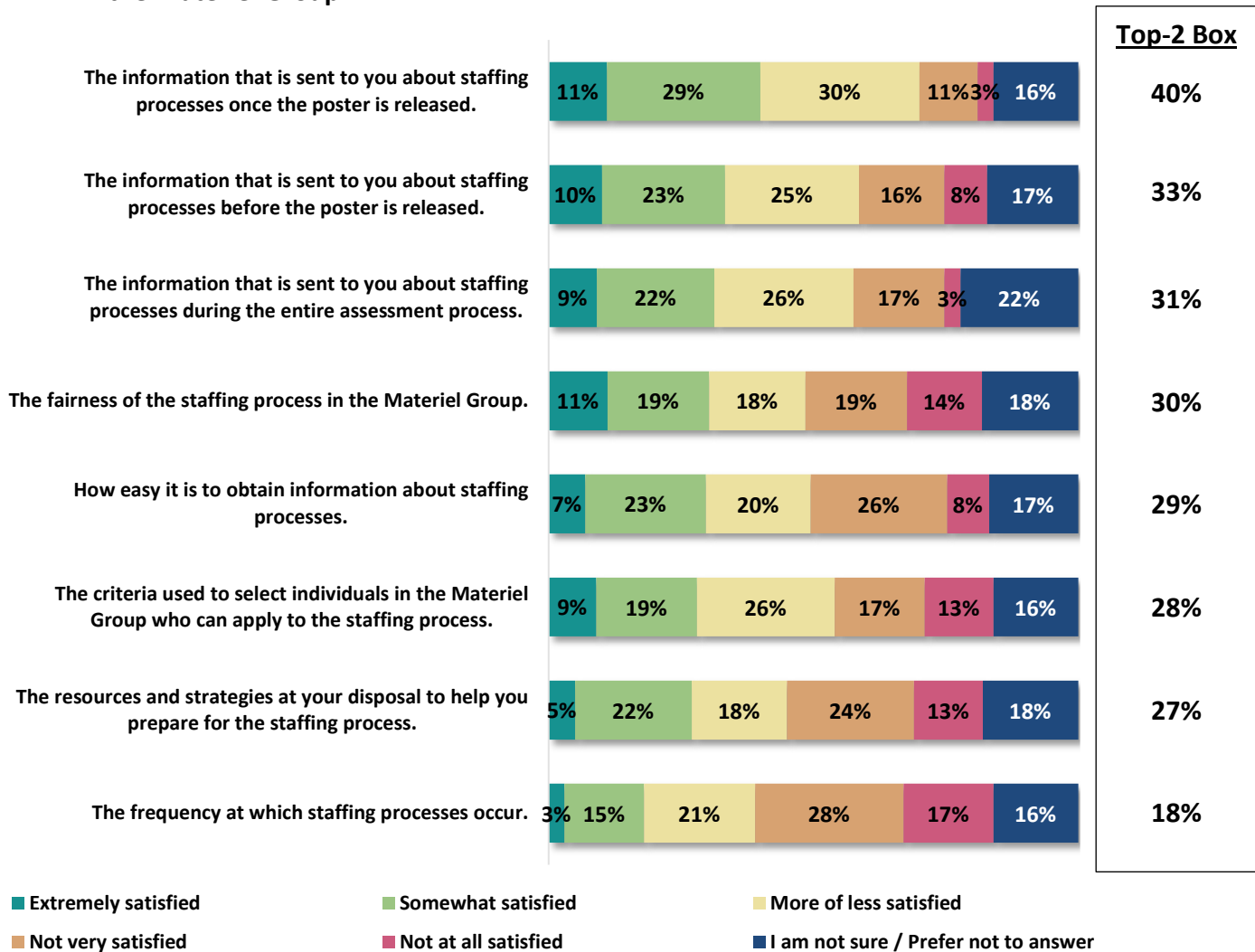
Q40. Considering the last time you failed the most recent ENG-05 / ENG-06 staffing process to which you applied, how satisfied are you with the feedback that you received during the Informal Discussion? Base: Respondents who failed their latest application to the ENG-05 / ENG-06 staffing process, n=86.

4.10 Satisfaction with ENG Staffing Process

Respondents were asked to specify their level of satisfaction with a presented list of aspects of the ENG staffing process in the Materiel Group. Two in five respondents (40%) were extremely or somewhat satisfied with the information that is sent about staffing processes once the poster is released, the highest total among all dimensions considered in the survey.

Roughly 1 in 3 respondents were extremely or somewhat satisfied with the information sent about staffing processes before the poster is released (33%), the information that is sent about staffing processes during the entire assessment process (31%) and the fairness of the staffing process in the Materiel Group (30%).

Figure 42 – Satisfaction with Aspects of the ENG Staffing Process in the Materiel Group



Q41. How satisfied are you with the following aspects of the ENG staffing process **in the Materiel Group**: Base: All respondents, n=261.

Nearly 3 in 10 respondents were extremely or somewhat satisfied with the ease of obtaining information about the staffing process (29%), the criteria for selecting those who can apply (28%) and the resources and strategies available to prepare for the staffing process (27%).

Finally, nearly 2 in 10 respondents (18%) were satisfied with the frequency at which staffing processes occur in the Materiel Group.

Key Segments

Analysis of the top-5 aspects shows that active/retired military engineers are more likely to be extremely or somewhat satisfied with **information that is sent about staffing processes before the poster is released** compared to non-military engineers (42% vs 27%).

Segments that have a greater tendency to be satisfied with **the fairness of the staffing process in the Materiel Group** include:

- Active/retired military engineers compared to non-military engineers (45% vs 23%).
- Respondents with an ENG-05 level or higher compared to those with an ENG-04 level or lower (41% vs 22%).
- Engineers who did not identify as a member of an Employment Equity group compared to those who belong to an EE group other than visible minorities (37% vs 24%).

Segments that have a greater tendency to be satisfied with **how easy it is to obtain information about staffing processes** include:

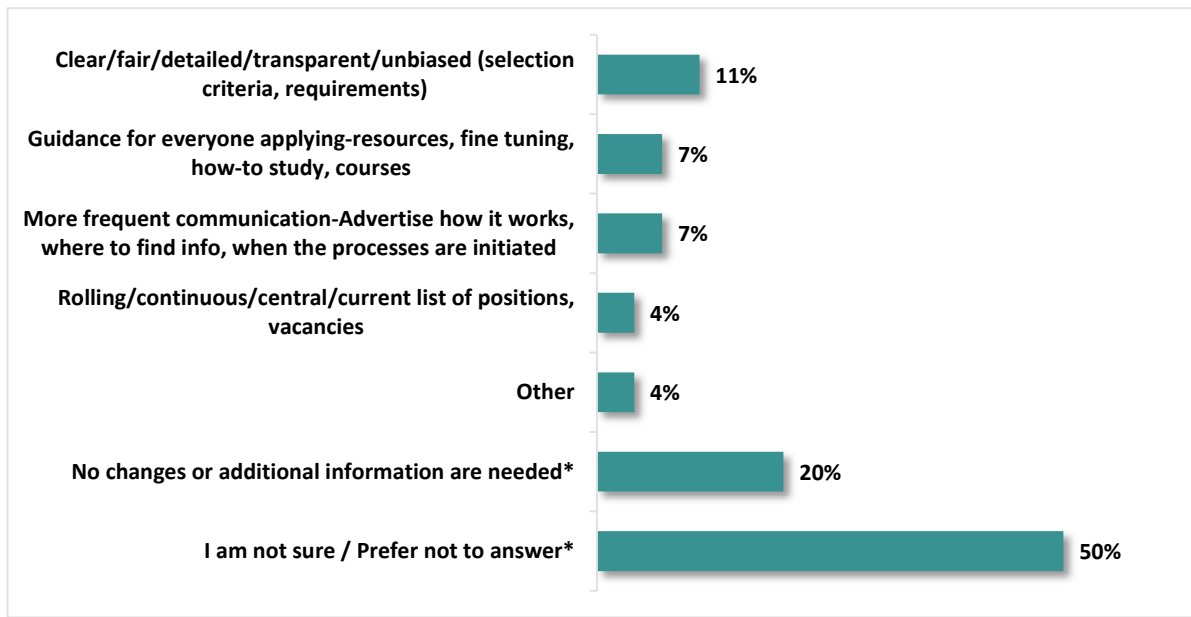
- Active/retired military engineers compared to non-military engineers (38% vs 24%).
- Respondents with an ENG-05 level or higher compared to those with an ENG-04 level or lower (35% vs 24%).

4.11 Receiving Additional Staffing Process Information

A minority of respondents provided suggestions for any additional information they would like to receive about staffing processes or any changes to the type of information that they can already access.

Over 1 in 10 respondents (11%) were interested in receiving information that clearly outlines the selection criteria and requirements for the staffing process. Other suggestions included providing more guidance to those applying, and having more frequent communications regarding how the process works.

Figure 43 – Additional Information and Changes to the Type of Information Received About Staffing Processes



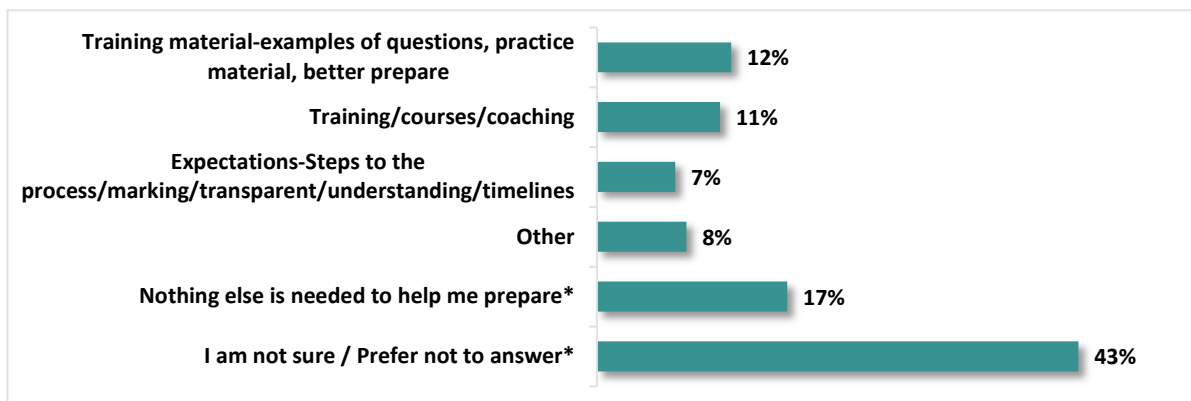
Additional Staffing Process Information			
3% or lower			
Changes in process to reflect reality/Abilities/Experience, not just words from a course	3%	Application time frame-precise and reasonable	1%
Non advertised staffing-why?	1%	Debrief after process (not just grades)	1%

Q42. What additional information, if any, would you like to receive about staffing processes? Or similarly, how would you change the type of information to which you already have access regarding staffing processes? Base: All respondents, n=261. *Response options presented to respondents.

4.12 Additional Activities for Staffing Process Preparations

Respondents were asked to describe additional activities that they would like for the ENG community in order to better prepare for an ENG staffing process written exam and interview. Respondents frequently described additional training opportunities specifically tailored for the written exam and interview. More than 1 in 10 respondents described examples of questions and practice material to better prepare (12%), while others requested more courses and coaching to generally assist with preparations (11%).

Figure 44 – Additional Activities for the ENG Community to Better Prepare for an ENG Staffing Process Written Exam and Interview



Additional Staffing Process Preparation Activities			
3% or lower			
Writing communication-'formal', BN and memos	3%	Heading in the right direction/keep up the good work	1%
KLC-training provided-more clarity	3%	Not aware	1%
Mentoring	2%	Rethink the process-One size fits all	1%
Learn to be a good engineer -not studying for staffing process	1%		

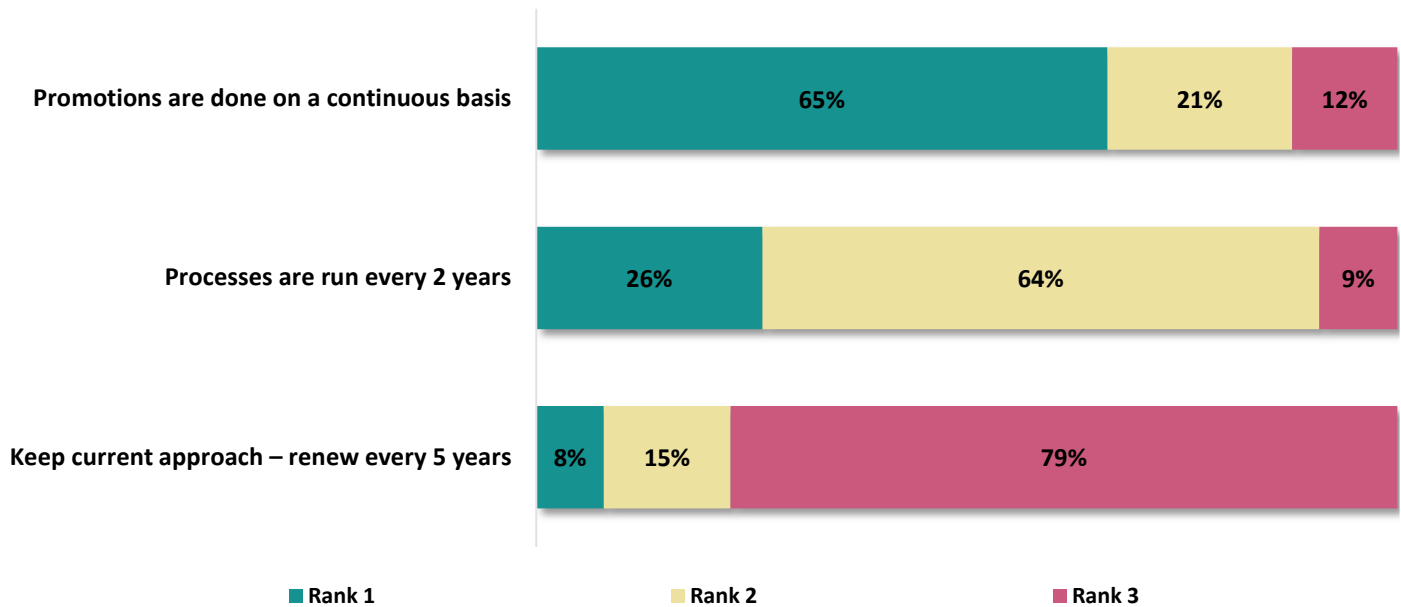
Q43. What additional activities would you like the ENG community to do to better prepare you for an ENG staffing process written exam and interview? Base: All respondents, n=261. *Response options presented to respondents.

Nearly 1 in 10 respondents described understanding expectations to the process including marking and staffing process timelines (7%) rather than specific activities, while 17% felt that no additional activities were needed.

4.13 Ranking Collective Staffing Process Approaches

Engineers were asked to rank three collective staffing process approaches from most to least appealing. Overall, more frequent promotion opportunities were more appealing than infrequent collective staffing process approaches. Nearly 2 in 3 respondents (65%) ranked promotions done on a continuous basis as the most appealing approach.

Figure 45 – Ranking Collective Staffing Process Approaches in Terms of Appeal



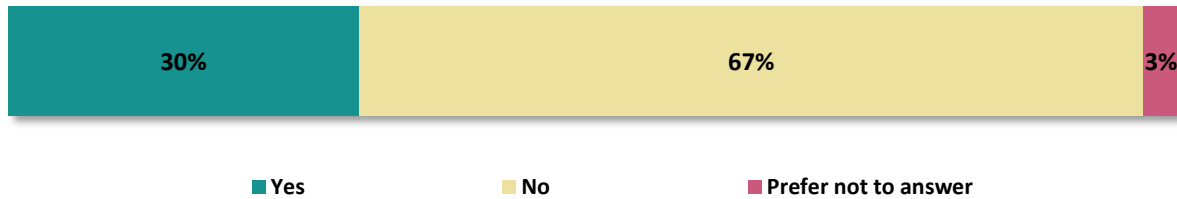
Q44. Currently, the ENG staffing process takes place every 5 years. How would you rank the following three collective staffing process approaches in terms of appeal – click and drag the option you prefer to the top of the list and then order the remaining from most appealing to least appealing. Base: All respondents, n=261.

Nearly 2 in 3 respondents (64%) ranked processes run every 2 years as the second most appealing approach, while 79% felt that the current approach of renewing every 5 years was the least appealing.

4.14 Latest ENG-05 Staffing Process Applications

Respondents were asked to specify whether they had applied to the last ENG-05 staffing process. 3 in 10 respondents (30%) applied for the latest ENG-05 staffing process, while 67% of respondents did not.

Figure 46 – Application Status for the Latest ENG-05 Staffing Process



Q45. Did you apply to the last ENG-05 staffing process? Base: All respondents, n=261.

Key Segments

Segments who tended to report **applying to the last ENG-05 staffing process** include:

- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (45% vs 12%).
- Engineers having been at their current level for 5 or more years compared to those with more experience (41% vs 24%).
- Respondents 35 to 54 years old (39%) compared to those aged 18 to 34 (22%) or 55 years or older (17%).

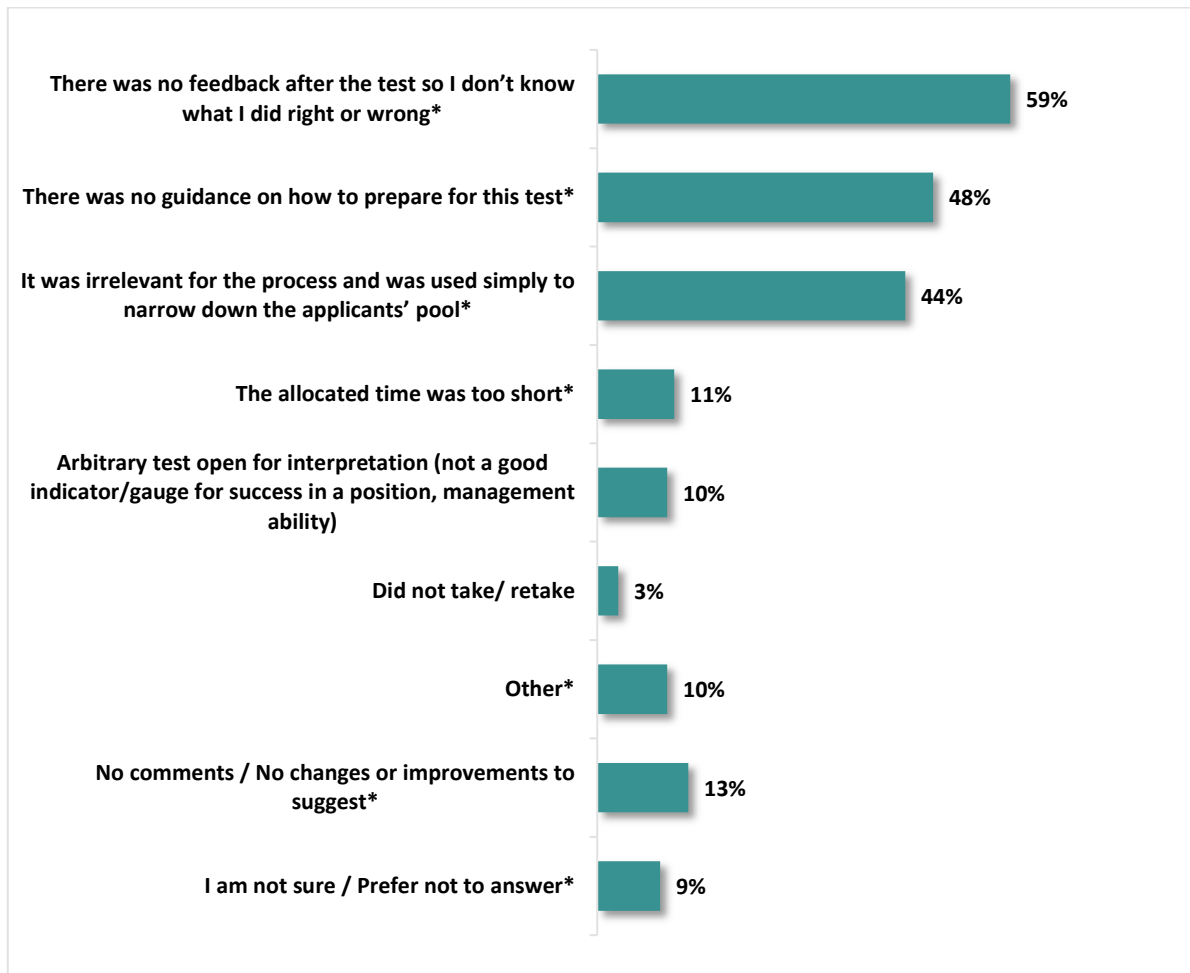
4.15 Improvements to MMSE 840

Applicants to the latest ENG-05 staffing process were asked to provide their suggestions for any changes or improvements that could be made to the Middle Management Situational Exercise 840 (MMSE 840) that was completed as part of the most recent ENG-05 staffing process.

The majority of applicants offered a series of complaints regarding the MMSE 840 exercise as part of the ENG-05 staffing process due to inadequate preparations and relevance. Nearly 3 in 5 applicants (59%) described receiving no feedback after completing the test limiting the opportunity of learning from their mistakes.

Nearly 1 in 2 applicants (48%) described receiving no guidance on how to prepare for the exercise testing, while 44% felt that the exercise was irrelevant for the process and used simply to narrow down the size of the pool.

Figure 47 – Suggested Improvements to the Middle Management Situational Exercise 840 (MMSE 840) Completed as Part of the ENG-05 Staffing Process



*Q46. Please provide us your comments regarding any changes or improvements you believe could be made to the Middle Management Situational Exercise 840 (MMSE 840) that you completed as part of the most recent ENG-05 staffing process to which you applied. (SELECT ALL THAT APPLY) Base: Respondents who applied to the last ENG-05 staffing process, n=79. *Response options presented to respondents.*

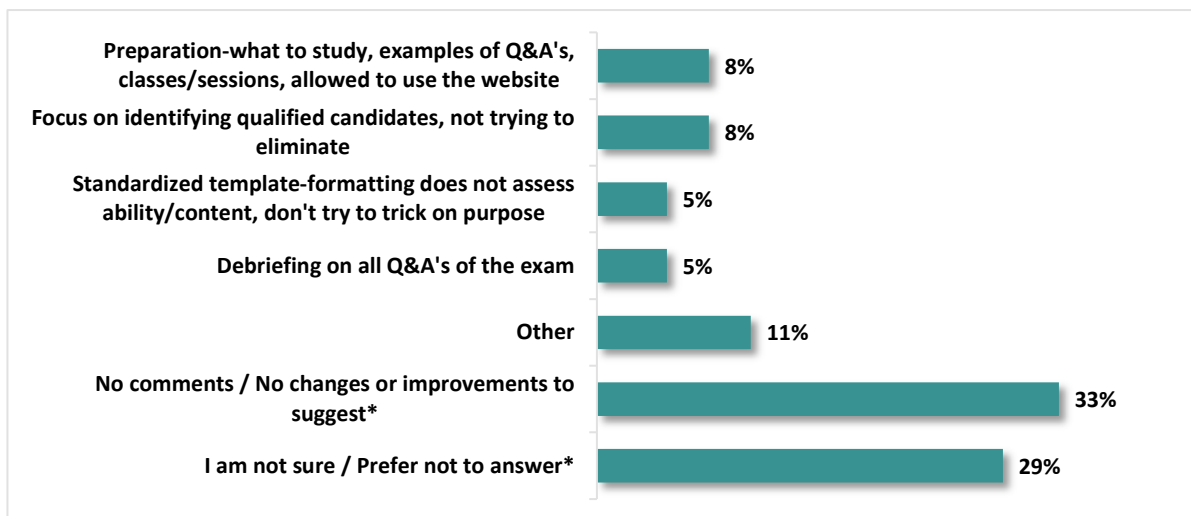
Over 1 in 10 applicants felt that various testing measures for the MMSE 840 were not structured properly, with many feeling the allocated time was too short (11%) and that the testing measures were arbitrary as an indicator of success in a position (10%). Finally, 13% of applicants felt there were no changes or improvements needed.

4.16 Improvements to the Written Exam

Applicants to the latest ENG-05 staffing process were asked to provide their suggestions for any changes or improvements that could be made to the written exam that was completed as part of the most recent ENG-05 staffing process.

Nearly 1 in 10 applicants suggested improving the availability and knowledge of what to study (8%). Another 8% suggested a focus on identifying as many qualified candidates as possible rather than focusing on eliminating candidates. A more standardized template was suggested by a few who felt the current approach does not assess ability and is designed to trick applicants (5%). A few also suggested ensuring there is a debriefing on all Q&A's of the exam. One in three applicants (33%) had no changes or improvements to suggest for the written exam.

Figure 48 – Suggested Improvements to the Written Exam as Part of the ENG-05 Staffing Process



Additional Improvements to the Written Exam			
4% or lower			
Scoring grid-predefined/available before/higher denominator	4%	No names should be on the test (Avoid potential bias)	3%
Too narrow criteria of evaluation, discriminatory	4%		

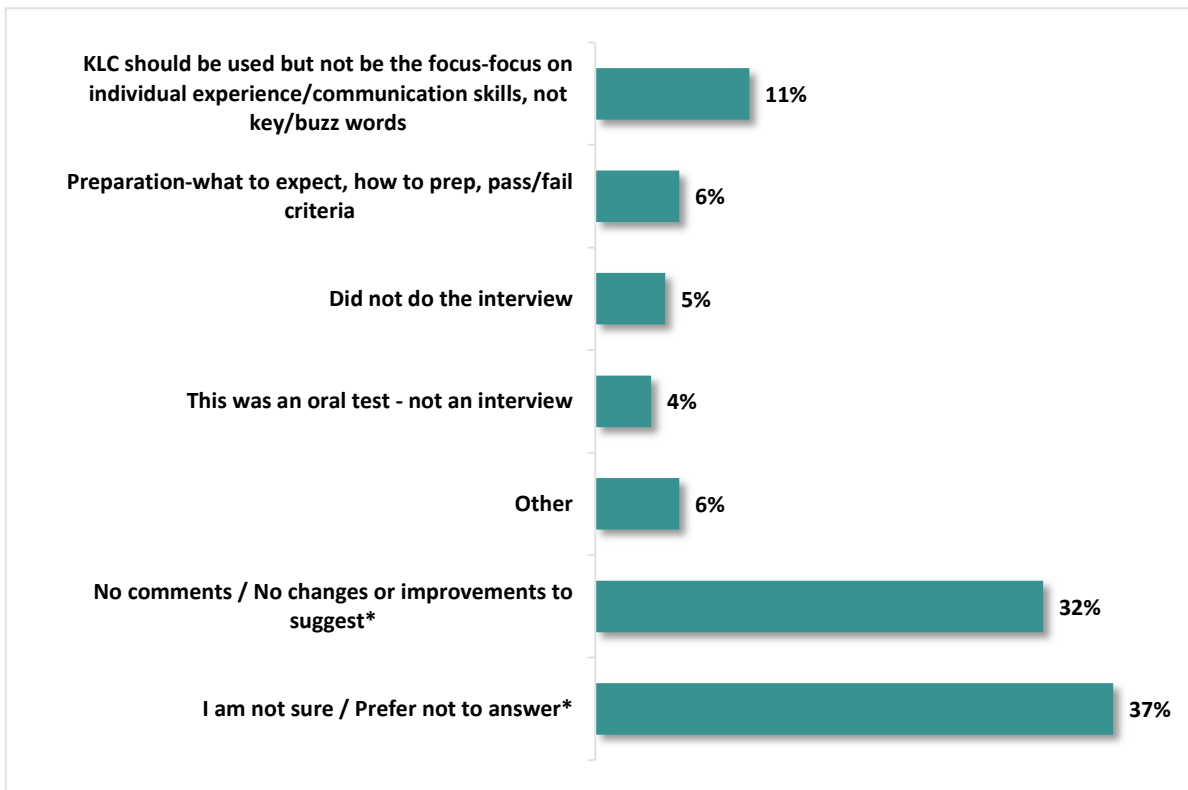
Q47. Please provide us your comments regarding any changes or improvements you believe could be made to the written exam you wrote as part of the most recent ENG-05 staffing process to which you applied. Base: Respondents who applied to the last ENG-05 staffing process, n=79. *Response options presented to respondents.

4.17 Improvements to the Interview

Applicants to the latest ENG-05 staffing process were asked to provide their suggestions for any changes or improvements that could be made to the interview that was completed as part of the most recent ENG-05 staffing process.

The most common theme on which respondents touched on was that the Key Leadership Competencies should be used but not overshadow individual experience and communication skills. As well, 6% requested applicants receive more information about the interview so they can better prepare, including what to expect, how to prepare and what the evaluation criteria are (6%). Many either had not comments (32%) or were not sure what changes to recommend (37%).

Figure 49 – Suggested Improvements to the Interview as Part of the ENG-05 Staffing Process



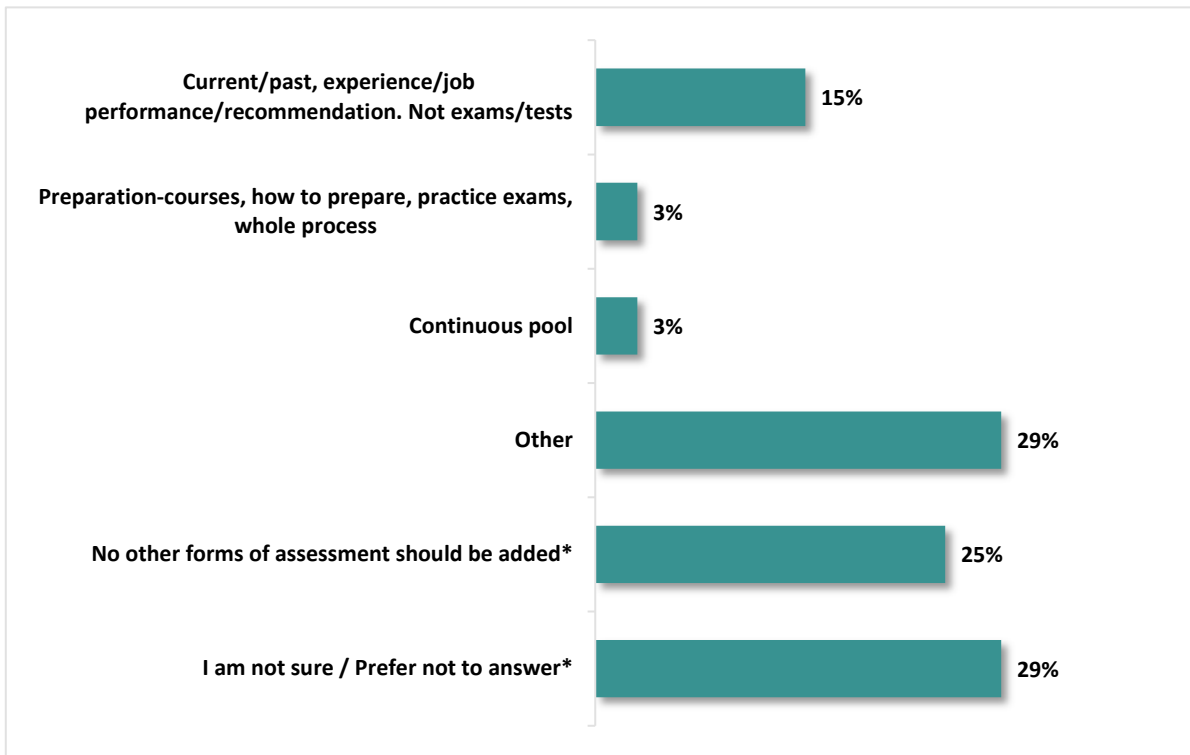
Q48. Please provide us your comments regarding any changes or improvements you believe could be made to the interview in which you participated as part of the most recent ENG-05 staffing process to which you applied. Base: Respondents who applied to the last ENG-05 staffing process, n=79. *Response options presented to respondents.

4.18 Improvements for Future Staffing Processes

Applicants to the latest ENG-05 staffing process were asked to provide their suggestions for any changes or improvements they would recommend to the methods used to assess candidates for future staffing processes. Suggestions for improvements to the future of assessment of candidates for staffing processes were very diverse across applicants.

The most common suggestion (15%) saw respondents recommend that job performance and experience be the priority when evaluating candidates, not exams and tests as previously used.

Figure 50 – Improvements to Candidate Assessment Methods for Future Staffing Processes



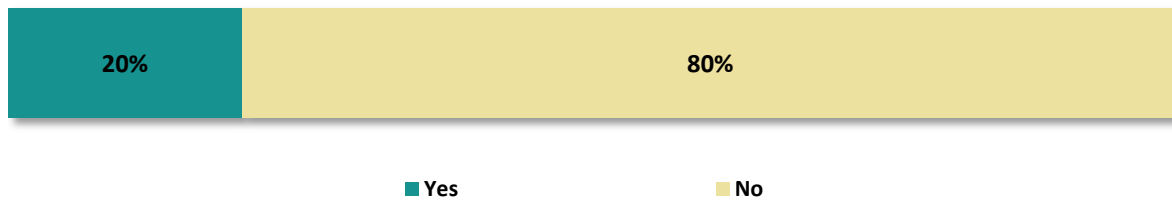
Q49. What additional changes, if any, would you recommend to the methods used to assess candidates for future staffing processes? Your suggestions could include changes to the current methods used or suggestions for new approaches that could be considered. Base: Respondents who applied to the last ENG-05 staffing process, n=79. *Response options presented to respondents.

Most participants felt either that no other forms of assessment should be added (25%) or they were not sure what additional changes could be made (29%).

4.19 ADM(Mat) as a Civilian ENG

One in five respondents (20%) joined ADM(Mat) as a civilian ENG within the past 2 years.

Figure 51 – Joining ADM(Mat) as a Civilian ENG in the Past 2 Years



Q50. Did you join ADM(Mat) as a civilian ENG in the past 2 years? Base: All respondents, n=261.

These respondents were presented a list of topics covered as part of a new staff member's onboarding process and asked to rate their importance. Overall, 3 in 5 respondents (60%) felt that each of the topics covered in the onboarding process were extremely important or important.

Among the themes presented, training, career development and personal development were deemed the most important, with at least one third of respondents rating each of these themes extremely important. These are closely followed by the ENG staffing process.

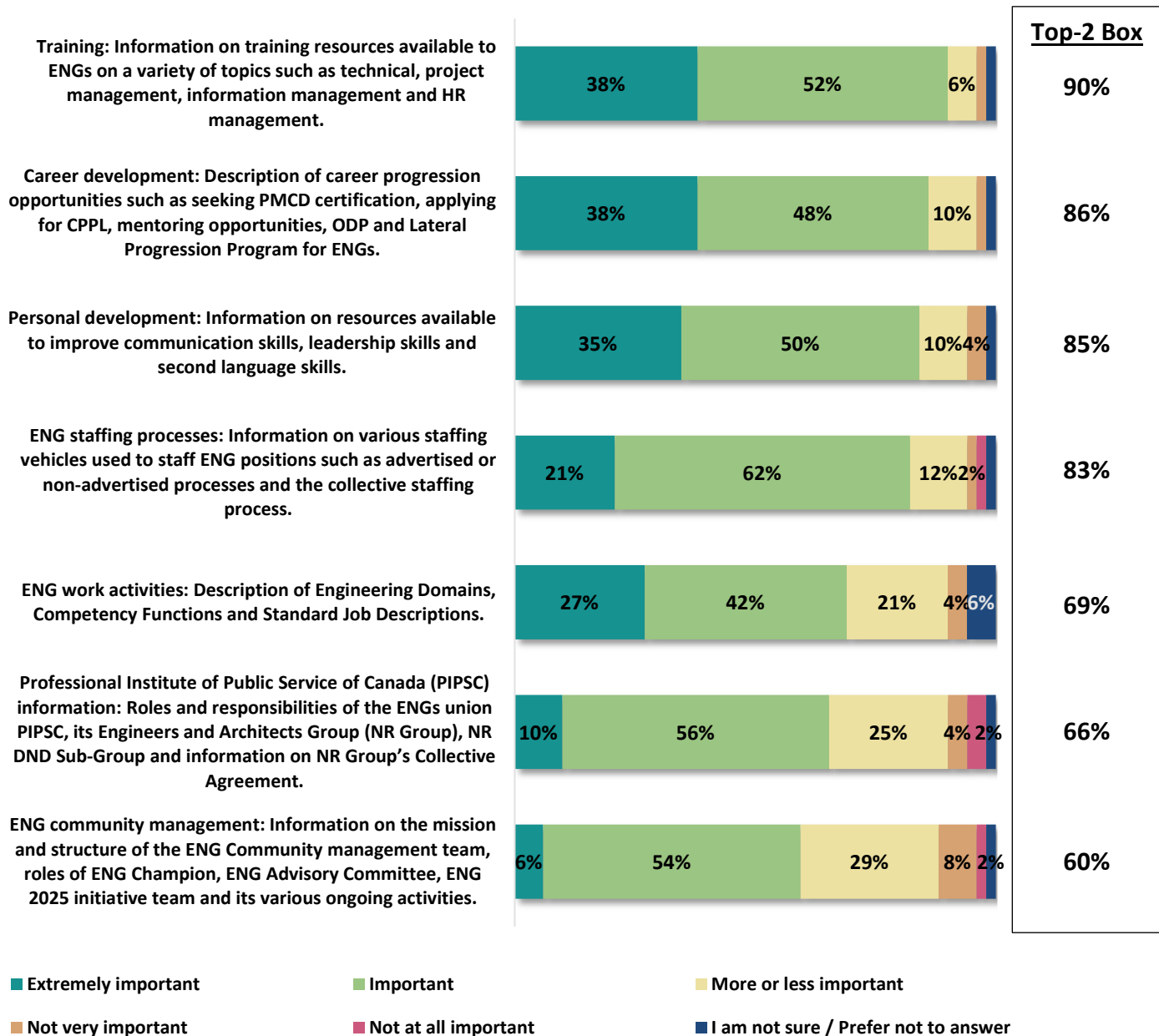
More than 4 in 5 respondents felt that the following measures were extremely important or important:

- Training (90%).
- Career development (86%).
- Personal development (85%).
- ENG staffing processes (83%).

More than 3 in 5 respondents who recently joined ADM(Mat) felt that the following topics were extremely important or important:

- ENG work activities (69%).
- Professional Institute of Public Service of Canada (PIPSC) information (66%).
- ENG community management (60%).

Figure 52 – Importance of Topics Covered in Onboarding Process of New Staff Members



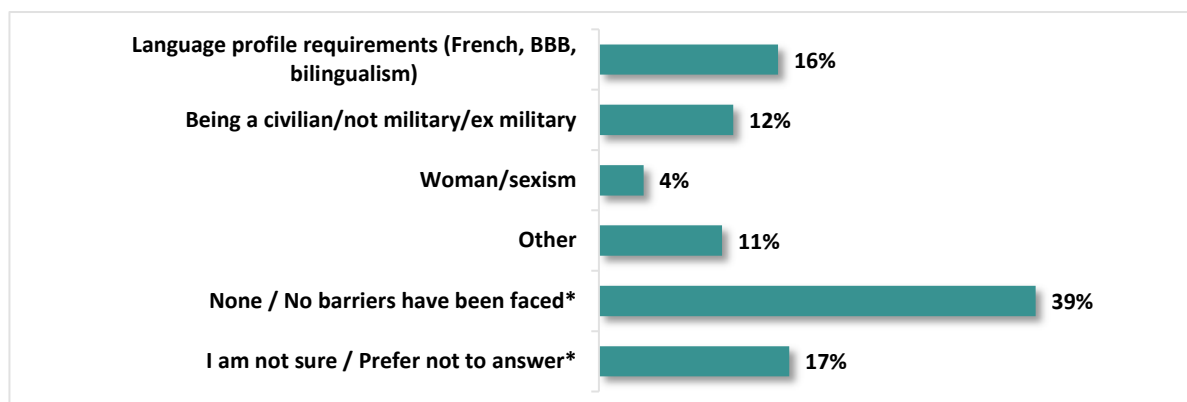
Q51. The following is a list of topics that will be covered as part of a new staff member's onboarding process. Considering the last time you went through an onboarding process, how important are each of these topics? Base: Respondents who joined ADM(Mat) as a civilian ENG in the past 2 years, n=52.

5. Equity, Diversity and Inclusion

5.1 Career Path Barriers

Engineers were asked to describe any barriers they may have faced or experienced when it comes to pursuing their career path in the Materiel Group. Overall, 39% believe they have not faced any such barriers and 17% were uncertain or preferred not to answer. Among the remaining respondents, 16% believe they have experienced a language profile barrier to their desired career path and another 12% identified a lack of military experience/ being a civilian as a barrier. Additional barriers faced in the workplace were focused on membership in an employment equity group.

Figure 53 – Barriers to Desired Career Paths in the Materiel Group



Additional Barriers Faced in the Workplace			
2% or lower			
Visible minority/race	2%	Language barrier-neither English or French is first language	1%
Reverse discrimination/Too much emphasis on EE	2%	Disability	1%
EE-Not enough	2%	Location	1%
Ageism	1%		

*Q52. Let's turn our attention to barriers you may face in the workplace. When it comes to pursuing the career path you want to pursue in the Materiel Group, what barriers, if any, do you feel you have faced or experienced? Base: All respondents, n=261. *Response options presented to respondents.*

Key Segments

Segments less likely to believe they have **faced no barriers in their career path** include:

- Engineers who identify as a member of an Employment Equity group compared to those who do not (25% vs. 50%).
- Respondents with an ENG-04 level or lower compared to those with an ENG-05 level or higher (32 vs. 44%).

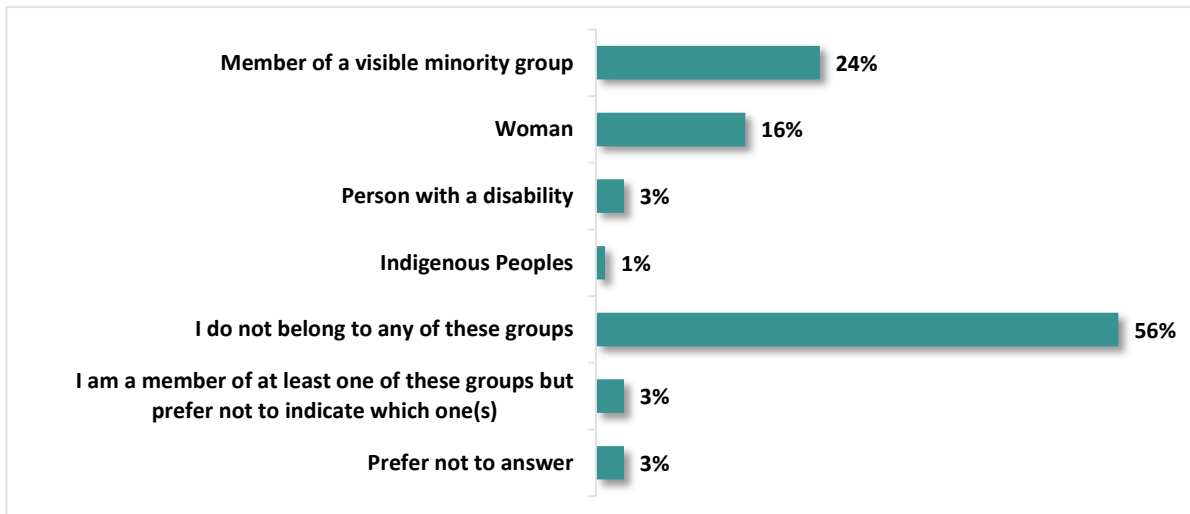
Segments more likely to feel they have faced **barriers being a civilian or because they have no military experience** include:

- Women compared to men (28% vs 8%).
- Engineers who identified as a member of an Employment Equity group other than visible minorities compared to those who are not a member of any EE group (25% vs 5%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (20% vs 5%).

5.2 Employment Equity Groups

Respondents were asked to list any applicable employment equity groups they identify with, specifically the four employment groups in the Employment Equity Act. Nearly 1 in 4 respondents (24%) self-identified as a member of a visible minority group, 16% self-identified as women, 3% as a person with a disability and 1% as an Indigenous person.

Figure 54 – Applicable Employment Equity Groups



Q53. One of the areas of focus for ENG 2025 is employment equity. The Employment Equity Act specifically refers to four employment equity groups. In which of the following groups, if applicable, do you identify? (MULTIPLE MENTION) Base: All respondents, n=261.

Nearly 3 in 5 respondents (56%) do not belong to any of the Employment Equity Act groups.

Key Segments

Non-military engineers were more likely to self-identify as a **member of a visible minority group** when compared to active/retired military engineers (32% vs 10%).

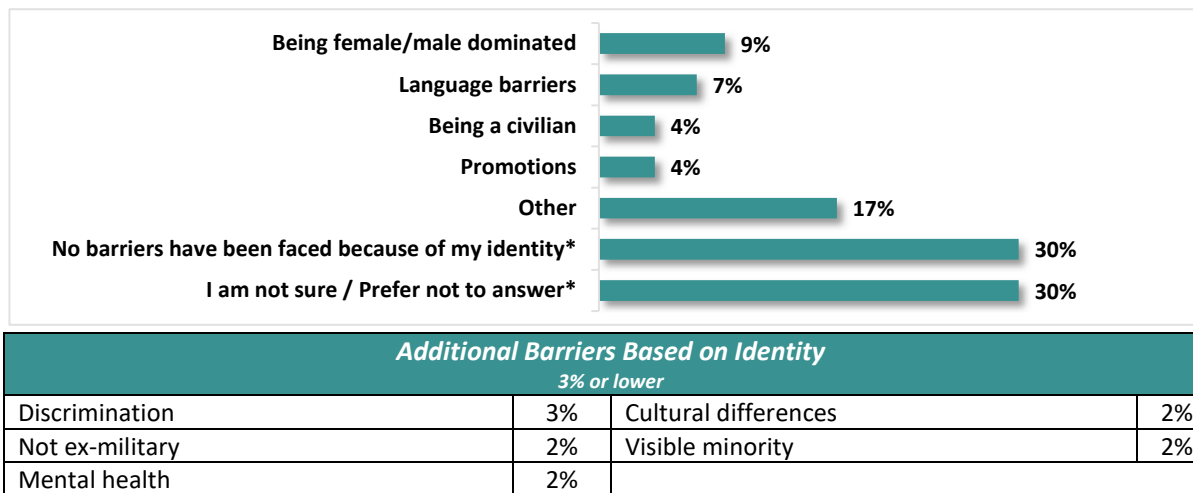
Segments who were more likely to self-identify as **women** include:

- Respondents who previously worked in the public service prior to joining DND (32%) compared to those working in the Canadian Armed Forces (10%) or stemming from academia (12%).
- Non-military engineers compared to active/retired military engineers (21% vs 7%).

5.3 Barriers Based on Identity

Engineers who experienced barriers in the workplace and are a member of at least one employment equity group were asked to describe which barriers, if any, they believe they have experienced based on their identity. Most respondents in this group either chose not to answer this question (30%) or believe they have not faced any barriers because of their identity (30%). Among the others, 9% believe their gender was a barrier and 7% believe they faced language-related barriers. Additional barriers included being a civilian or not ex-military, general discrimination for promotions, barriers related to mental health, or barriers related cultural differences or being a visible minority.

Figure 55 – Barriers Faced by Individuals Based on Identity



Q55. Individuals face barriers for a variety of reasons. Which barriers, if any, do you believe you have experienced because of your identity? Base: Respondents who experienced barriers in the workplace and are a member of at least one employment equity group, n=104. *Response options presented to respondents.

5.4 Programs to Overcome Identity Barriers

When asked to suggest what programs should be instituted to help people overcome barriers experienced because of how they self-identify, the majority were not certain what could be done (59%). Themes for programs that should be instituted include changes in the leadership culture to assist those at a lower level, and encouragement to overcome barriers through training.

Figure 56 – Instituting Programs to Overcome Barriers Based on Identity

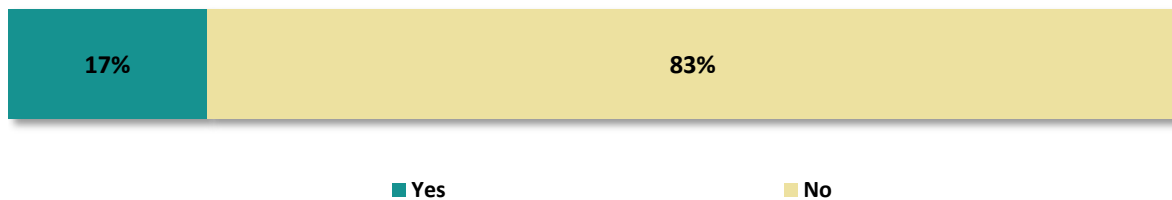


Q56. What programs should be instituted to help people overcome barriers experienced because of how they self-identify? Base: Respondents who are a member of at least one employment equity group, n=106.

5.5 Participation in Armchair Discussions

Nearly 1 in 5 respondents (17%) specified that they participated in the armchair discussions related to employment equity.

Figure 57 – Participation in Armchair Discussions Related to Employment Equity



Q57. Did you participate in the armchair discussions related to employment equity? Base: All respondents, n=261.

Key Segments

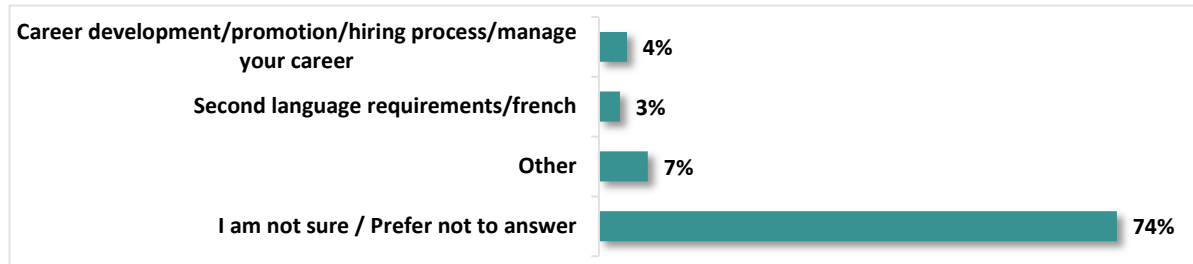
Segments who tended to have **participated in armchair discussions related to employment equity** include:

- Women compared to men (33% vs 14%).
- Engineers who identified as a member of an Employment Equity group other than visible minorities compared to those who are not a member of any EE group (27% vs 13%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (24% vs 13%).

5.6 Future Armchair Discussions

A variety of topics were proposed when respondents were asked to describe which topics they would like to see covered in future armchair discussions held by DND. Among some of the more common suggestions, we see career management or development (4%), as well as second language requirements at DND (3%).

Figure 58 – Topics for Armchair Discussions in the Future



Additional Topics for Armchair Discussions 2% or lower			
DE&I-Positive discrimination/promote diversity	2%	Unaware of armchair discussions	1%
Technical development	2%	Civilians -how to get the same opportunities/advancement/experiences	1%
Truthfulness/honest/true intentions	2%	Reverse discrimination	1%
All/Any/General	1%	LGBT inclusion	1%
Ethnicity Awareness/Exposure to other cultures (success stories)	1%	Unconscious bias	1%
Personal challenges/discrimination experiences	1%	Action-stop discussing and show	1%
Mental health	1%	Hiring on merit	1%
Better things to do/waste of time	1%		

Q58. If DND were to hold more armchair discussions in the future, what topics would you like to see covered? Base: All respondents, n=261.

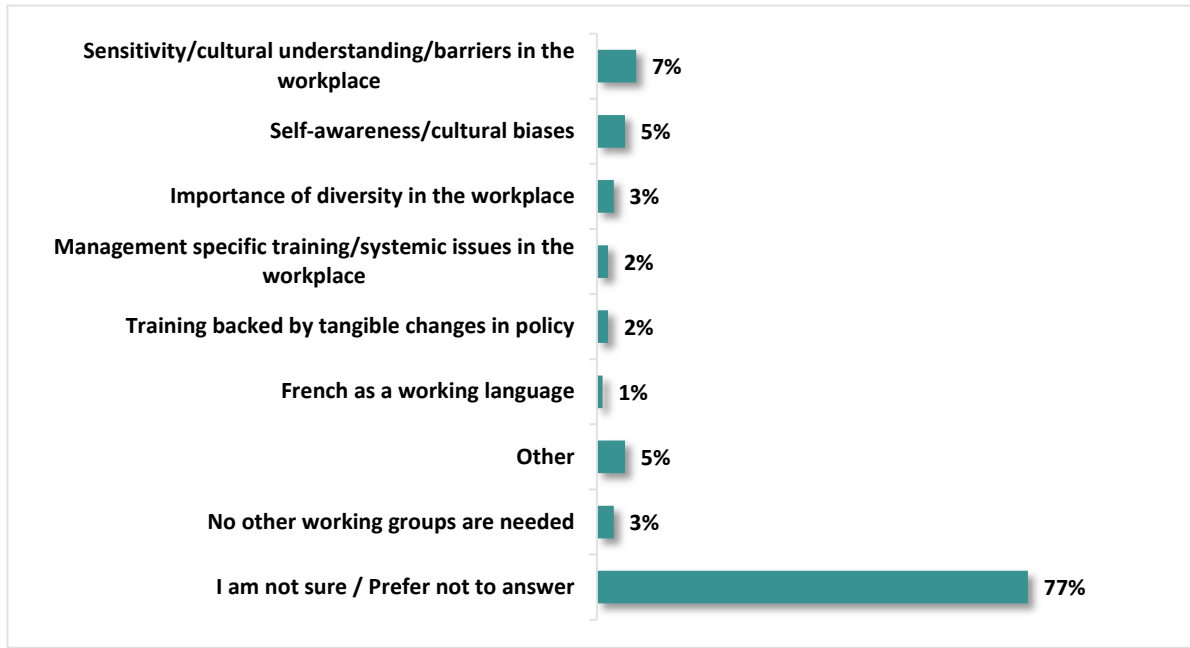
Nearly 3 in 4 respondents (74%) were not sure of what additional armchair discussion topics should be covered by DND in the future.

5.7 Training for Needs of Employment Equity Groups

Roughly one-quarter of respondents suggested a training topic they believe would help individuals in the Materiel Group at large better understand the needs of certain groups who tend to face barriers because of how they self-identify. Training topics were focused on increasing the level of knowledge for different cultures and the barriers they experience in the workplace, as well as improving self-awareness and reducing cultural biases.

Additional areas of focus included conveying the importance of diversity in the workplace, focusing on addressing systemic issues at the management level, backing up training with additional policy changes, and, the acceptance of French as a working language.

Figure 59 – Training Topics for Helping Individuals in the Materiel Group Better Understand Needs of Employment Equity Groups



Q59. What training topics come to mind that you believe would help individuals in the Materiel Group at large better understand the needs of certain groups who tend to face barriers because of how they self-identify, including Employment Equity Groups (Women, Visible Minorities, Persons with Disabilities and Aboriginal Peoples)? Base: All respondents, n=261.

6. Community Management

6.1 Role and Purpose

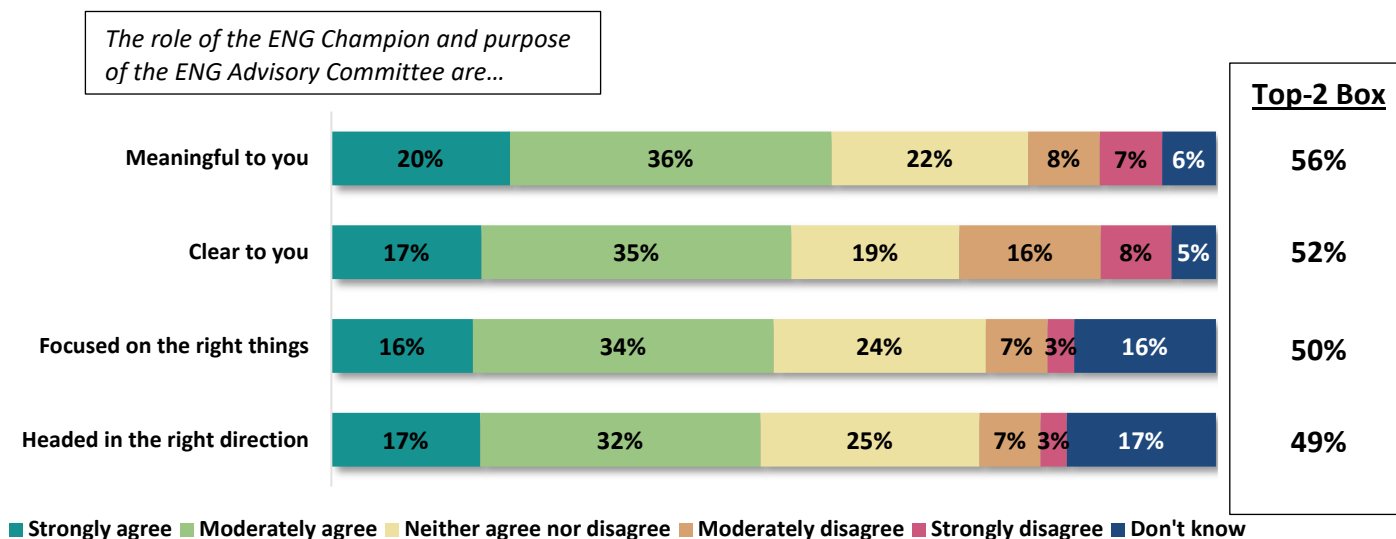
Respondents were asked to provide their feedback on the role of the ENG Champion and on the purpose of the ENG Advisory Committee after being provided with the following descriptions:

*The **ENG Champion** guides the Materiel Group in establishing and maintaining a professional and agile ENG community so that it contributes to the Mat Group in delivering the materiel and services required by the CAF. The ENG Champion is responsible for contributing departmental expertise and insight to the development of engineer workforce initiatives. The ENG Champion chairs the ENG Advisory Committee (AC).*

*The **ENG AC** performs two primary functions. First, it provides advice, recommendations, and council to the ENG Champion. Second, it is the primary vehicle for the ENG Champion to engage the divisions in contributing to the ENG community initiatives.*

Roughly 1 in 2 respondents (49%) strongly or moderately agreed with each of the statements regarding the role and purpose of the ENG Champion and ENG AC. More than 1 in 2 respondents strongly or moderately agreed that the ENG Champion and ENG AC are meaningful (56%) and clear to them (52%).

Figure 60 – Agreement with the Role and Purpose of the ENG Champion and ENG AC Based on Previous Communications



Q60. We would now like to get your feedback on the role of the ENG Champion and on the purpose of the ENG Advisory Committee. Based on various communications you may have received regarding the ENG Champion and the ENG AC, to what extent do you agree or disagree with the following statements?
Base: All respondents, n=261.

Roughly 1 in 2 respondents strongly or moderately agreed that the ENG Champion and ENG AC are focused on the right things (50%) and headed in the right direction (49%).

6.2 Relevance of ENG 2025 Working Groups

Respondents were presented with a list of the ENG 2025 Working Groups and asked to rank each working group based on the relevance to achieving the ENG 2025 initiative’s vision:

“To provide the tools and opportunities to enable the ENG community to attain its full potential”.

Overall, more than 3 in 5 respondents (62%) rated each of the ENG 2025 working groups as extremely relevant or relevant. The most relevant working groups were:

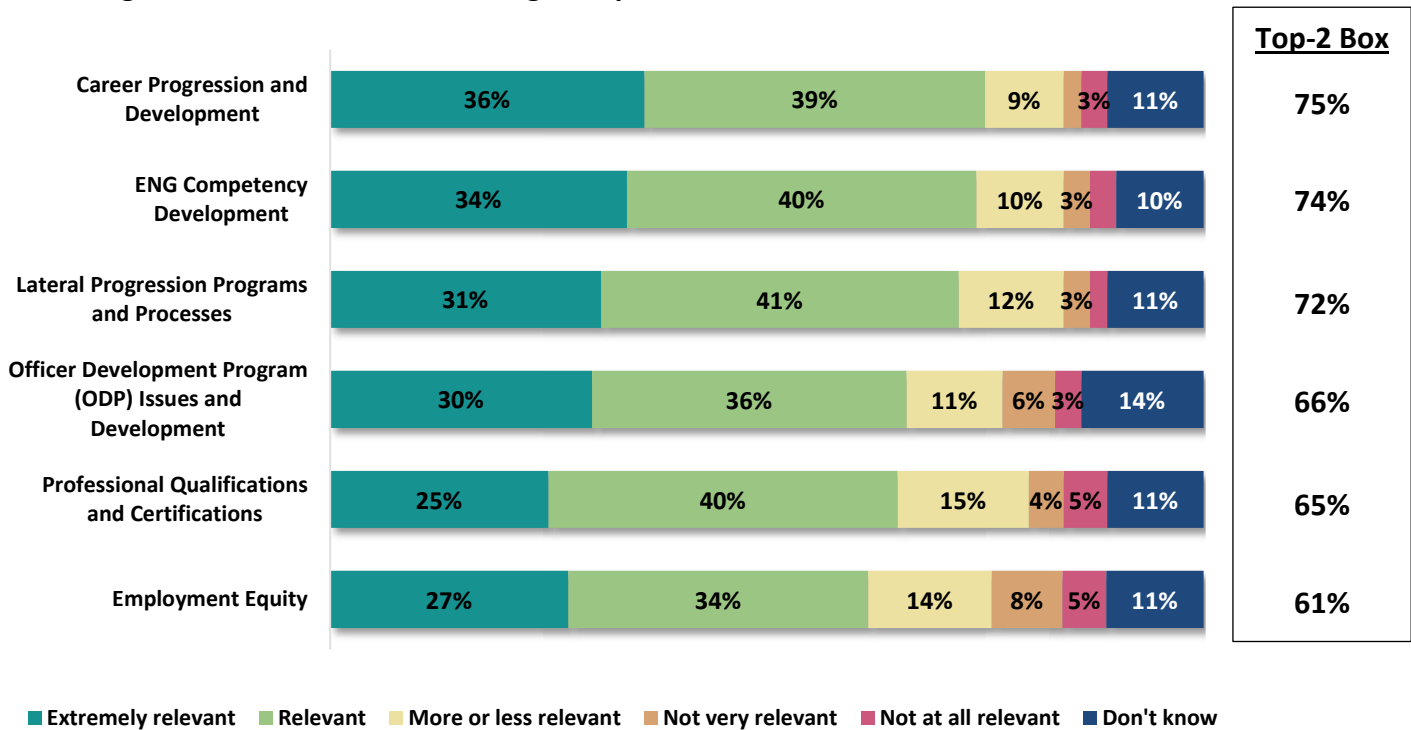
- Career Progression and Development (75%).
- ENG Competency Development (74%).
- Lateral Progression Programs and Processes (72%).

These were then closely followed by the following:

- Officer Development Program (ODP) Issues and Development (66%).
- Professional Qualifications and Certifications (65%).
- Employment Equity (61%).

It should be noted that not everyone was familiar with each of the working groups as seen through the 10% to 14% who indicated they did not know how relevant each working group was to achieving the initiative’s mission.

Figure 61 – Relevance of Working Groups to Achieve the ENG 2025 Initiative



Q61. As you may or may not know, the vision of the ENG 2025 and its Working Groups is “To provide the tools and opportunities to enable the ENG community to attain its full potential”. A working group has been created to address very specific areas, as shown in the list below. How would you rate the relevance of each of the ENG 2025 Working Groups when it comes to achieving the initiative’s vision? Base: All respondents, n=261.

Key Segments

Segments that tended to rate the **Career Progression and Development** working group as extremely relevant or relevant include:

- Respondents stemming from academia prior to working in DND (90%) compared to those working in the Canadian Armed Forces (70%) or the Defence industry (68%) prior to joining DND.

- Engineers with sponsorship through Materiel Acquisition & Support compared to those without an MA&S ODP sponsorship (86% vs 73%).

Respondents stemming from academia prior to working in DND tended to rate the **Lateral Progression Programs and Processes** working group as extremely relevant or relevant (86%) when compared to those working in the Canadian Armed Forces (60%) or the Defence industry (63%) prior to joining DND.

Segments that tended to rate the **Officer Development Program (ODP) Issues and Development** working group as extremely relevant or relevant include:

- Respondents stemming from academia prior to working in DND compared to those previously working in the Canadian Armed Forces (80% vs 60%).

Segments that tended to rate the **Employment Equity** working group as extremely relevant or relevant include:

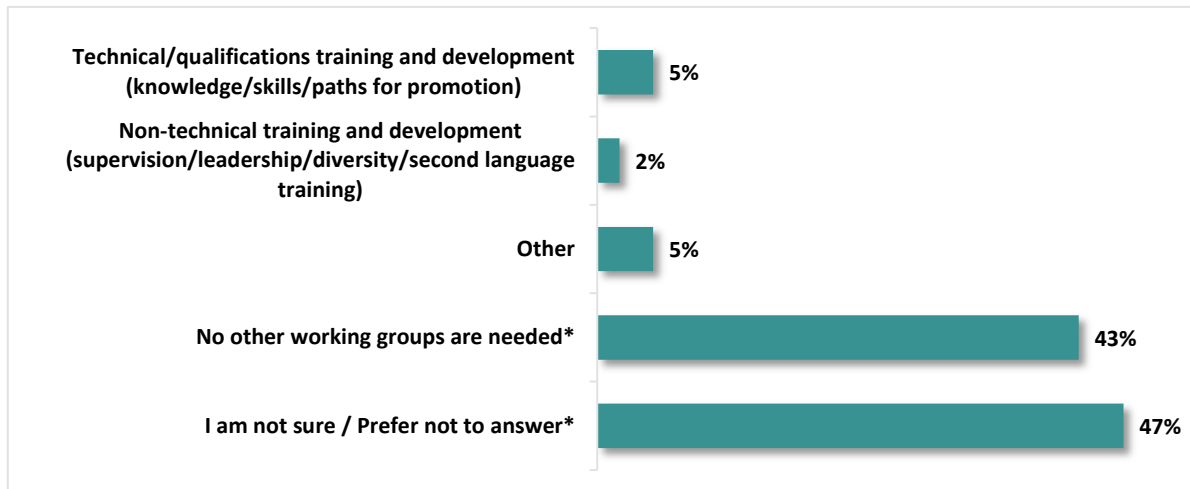
- Engineers who identified themselves as a visible minority compared to those that did not identify as any Employment Equity group (86% vs 52%).
- Engineers who identified as a member of an Employment Equity group compared to those who did not (76% vs 52%).
- Respondents stemming from academia prior to working in DND compared to those previously working in the Defence industry (69% vs 45%).

6.3 Additional Working Groups

Respondents were asked if there should be any additional working groups created to further improve ENG 2025's ability to achieve its vision, as well the key issue, theme or area that the working group should focus on. Very few suggestions were proposed, with 43% feeling that no additional working groups need to be created to further improve ENG 2025's ability to achieve its vision and another 47% unsure or preferring not to answer.

Common themes for additional working groups included a focus on technical or qualifications training to assist with career development, while others were interested in non-technical skills to improve communication and leadership.

Figure 62 – Additional Working Groups to Further ENG 2025’s Vision



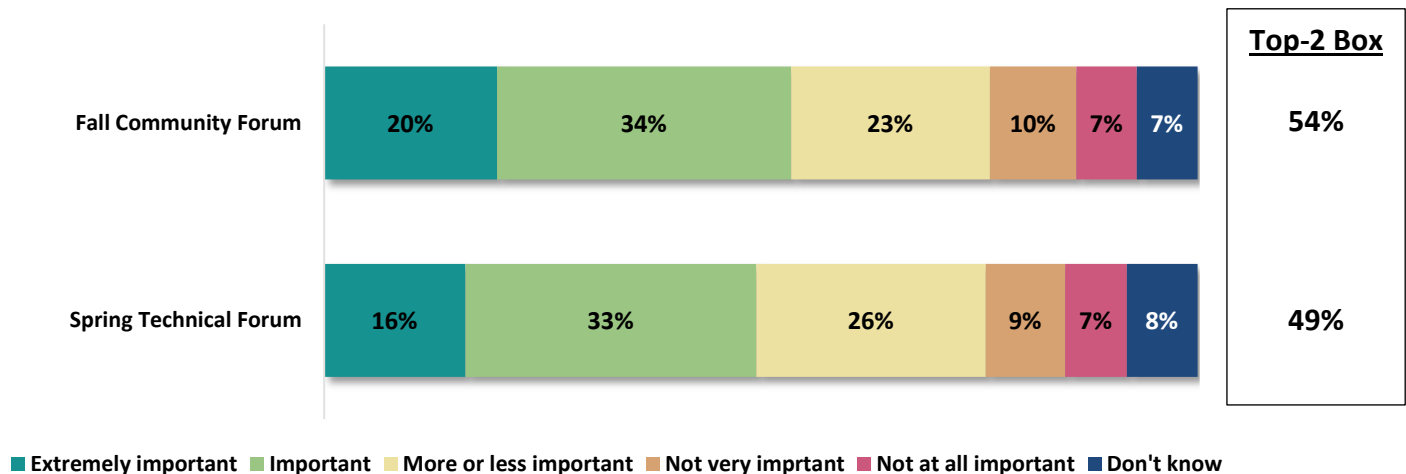
Q62. Do you believe that an additional working group should be created to further improve ENG 2025’s ability to achieve its vision? And if so, please indicate the key issue, theme or area on which this new working group should focus. Base: All respondents, n=261.
 *Response options presented to respondents.

6.4 Importance of ENG Forums

Respondents were asked to rate the importance for the two ENG Forums organized on a yearly basis: a fall community forum, and a spring technical forum. Overall, both ENG Forums were considered extremely important or important by roughly 1 in 2 respondents (49%).

The Fall Community Forum was slightly more preferred as more than 1 in 2 respondents (54%) considered it to be extremely important or important, compared to 49% for the Spring Technical Forum.

Figure 63 – Importance of ENG Forums Organized on a Yearly Basis



Q63. As you may know, there are two ENG Forums organized on a yearly basis: a fall community forum, and a spring technical forum. To what extent are each of these forums important to you? Base: All respondents, n=261.

Key Segments

Segments more likely to rate the **Fall Community Forum** as extremely important or important include:

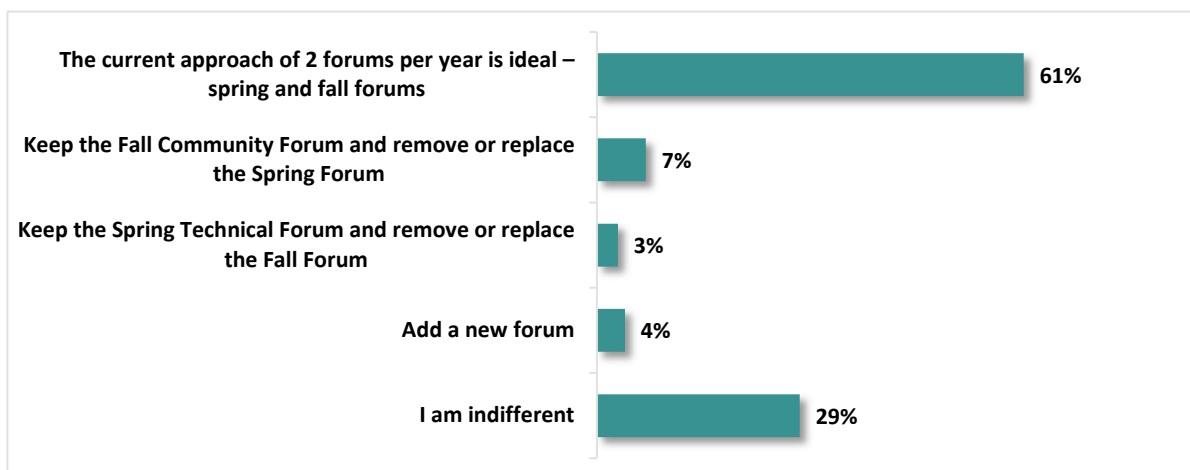
- Respondents currently working in the Regulatory & Technical Specialty domain compared to those working in the Materiel Support domain (67% vs 48%).
- Engineers who identified themselves as a visible minority compared to those that did not identify as any Employment Equity group (71% vs 48%).
- Respondents working in the DGLEPM (62%) and DGAEPM (67%) compared to those working in the DGMEPM division (36%).

Segments who tended to rank the **Spring Technical Forum** as extremely important or important include:

- Respondents currently working in the Regulatory & Technical Specialty domain compared to those working in the Materiel Support domain (63% vs 42%).
- Engineers who identified themselves as a visible minority compared to those that did not identify as any Employment Equity group (63% vs 44%).
- Respondents working in the DGLEPM (61%) and DGAEPM (61%) compared to those working in the DGMEPM division (32%).

Moving forward, a majority of respondents believe the current approach suits their needs and does not need to be changed while 29% are indifferent about changing the approach to the ENG Forums.

Figure 64 – Preferred Scenarios for ENG Forums

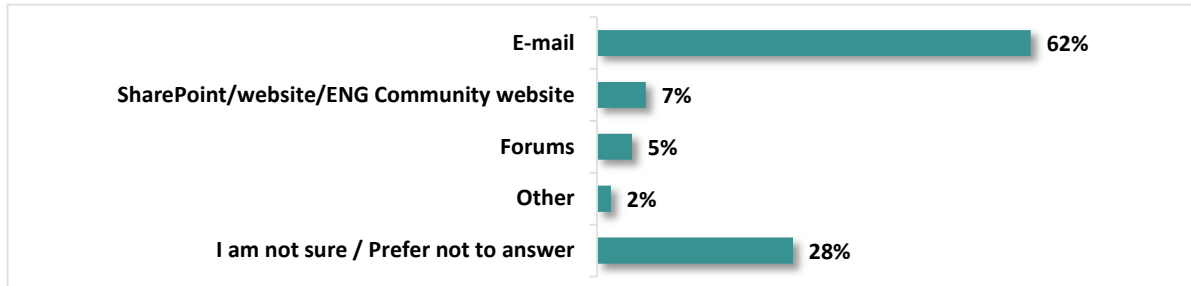


Q64. Based on how you value these types of forums, which of the following scenarios do you prefer? (MULTIPLE MENTION) Base: All respondents, n=261.

6.5 Receiving ENG Community Information

Respondents were asked to specify their preferred way to receive information from the ENG community. Over 3 in 5 respondents (62%) preferred receiving information via e-mail.

Figure 65 – Preferred Way to Receive Information from the ENG Community



<i>Additional Communication Methods</i>			
<i>3% or lower</i>			
Communiqués-Flash -Adm Mat-Communications	3%	Newsletter	1%
Direct e-mail (ENG Champion-not MatFlash)	2%	Working fine	1%
DWAN	2%	Workshops	<1%
Videos/vignettes (grouped and identified that I can watch at my own pace)	1%		

Q65. What is your preferred way to receive information from the ENG community? Base: All respondents, n=261.

Additional relevant online sources include SharePoint or the ENG community website (7%), as well as MatFlash (3%).

Conclusions

There appears to be interest in receiving career support and coaching from supervisors and for the most part, that support is being provided. In terms of more formal mentorship resources, the current resources available to engineers for career development appear to be underused. Many engineers are interested in formal resources and although engineers also seem to be, for the most part, aware of the resources available to them, only a small percentage (14%) have actually availed themselves of them. The resources themselves seem to be useful since those who used them felt they had a positive impact on their careers.

- ↳ **Potential Recommendation:** Strategies to better integrate these types of resources into the busy workdays of engineers might be appreciated and might lead to more uptake. Some promotion is also warranted since over one-third of engineers were not aware of the formal resources available to them.

The research also pointed to specific areas of career development that would be of interest to engineers as well as where, among these priorities, there may be gaps in how DND is addressing them. The research reveals that roughly half of engineers believe that the current training opportunities available through DND fully cover their needs for career development and, considering their career development priorities, that there are many gaps that could or should be addressed. It is also worth noting that many of the most popular areas of development for engineers were also where the gaps were the widest, such as in the areas of honing of communication skills (48 percent-point gap), opportunities for innovation and creative thinking (42 percent-point gap), honing of leadership skills (37 percent-point gap), developing of new technical skills (35 percent-point gap) and honing of technical skills (34 percent-point gap). The magnitude of the gap only tells part of the story though, since there are career development areas that are a priority for smaller groups of engineers, such as obtaining a post graduate degree, for which the gap is still meaningful and still warrants consideration.

- ↳ **Potential Recommendation:** In the end, what matters is that there are gaps (or at least perceived gaps) and that engineers will likely appreciate the department developing strategies to address them, since, after all, the career development areas are a priority for them.

Second language training (SLT) was one of the areas of interest in this research and the data shows that roughly two-thirds of respondents believe they could benefit from second language training, with the bulk of these respondents needing French-language training. The research also showed that SLT was an important career development area for 42% of all respondents. Considering 30% believe they have excellent or very good access to resources and training in this area, the gap for SLT (12%) may be somewhat understated when we consider that two-thirds feel they could benefit from this sort of training.

Results specifically pertaining to the lateral deployment pool and the overall ENG staffing process in the Materiel Group show some important room for improvement and dissatisfaction among respondents. The lateral deployment pool does address the career development needs of some engineers and those who have joined the pool while working in the Materiel Group have seen some sort of benefit from it, especially the exposure to many other opportunities. That said, a minority consider this path a priority for their career development and, among those having used it, roughly one in three recommended ways in which this resource could or should evolve over the next five years, suggesting an appetite for change in this area. Openness to change in how the lateral pool functions is also seen in the survey questions that explored how often staffing processes should run. The research findings show that 65% of respondents ranked promotions done on a continuous basis as the most appealing approach to the staffing process, followed by processes running every 2 years (26%). The least appealing option would be renewing processes every 5 years (8%).

The frequency at which staffing processes occur is not the only area of the staffing process attracting some dissatisfaction. Further opportunities for improvement reveal themselves when specific aspects of the staffing process are explored, in particular the fairness of the staffing process, how easy it is to obtain information about the staffing process, the resources and strategies available to staff to help them prepare for the staffing process and the criteria used to select individuals in the Materiel Group who can apply to the staffing process.

- ↳ **Potential Recommendation:** The appetite for change in how the lateral pool functions shows that this should be an area of focus for the Materiel Group. As much as changes will be welcomed, any outcome that results in something similar to the status quo will need to be properly managed with staff.

Another area of focus in this research were Key Leadership Competencies (KLC). Honing key leadership skills were an important career development area for many engineers which would make KLC courses a relevant resource. Uptake in the courses has been good, with 42% of engineers indicating they took one of the courses offered since September 2019. Given the widespread interest in honing leadership skills, it might be expected that there will be continued interest in the advanced course, which has only been taken by 8% of engineers. The courses, especially the advanced course, have proven mostly useful in preparing participants for competitions, with some impact on their daily work.

- ↳ **Potential Recommendation:** Uptake of the courses might be more widespread if these were more impactful on daily work. In terms of improving the courses, some of the ideas that were already suspected by the client team would seem to have some traction with respondents, including posting practice questions, offering more frequent courses and offering some sessions that only include the interview scenario portion.

Interest in post-grad education is high among respondents, especially younger, ENG-04 engineers. The research shows that one in five respondents consider a post graduate degree a career development priority in the Materiel Group and, when more directly asked about the idea, half would be interested in the prospect of post-grad programs developed through DND targeting highly technical expertise. Interest in the idea of a post-grad degree increases even more if DND were to fully or partially fund the program, even if it means working in the Materiel Group for twice the number of months or years as it took to complete the program.

- ↳ **Potential Recommendation:** The research suggests that the idea of offering post-grad education support would have some traction among engineers in the Materiel Group, especially ENG-04 engineers, and is worthy of further consideration. This type of “benefit” could also foster loyalty and prove appealing from a hiring perspective. A challenge may be to satisfy the range of technical areas that were of interest to respondents, which was quite varied.

Just over four in ten engineers believe they have faced some type of barrier at some point in their career path in the Materiel Group. That finding in and of itself is sufficient to warrant close attention and further research. This research did shed some light on some of these perceived barriers, and have most often included language profile barriers and being a civilian with a lack of military experience. A range of other barriers were raised by respondents, which included identity-related barriers. On that note, it is noteworthy that participants who do not identify as a member of one of the employment equity groups were twice as likely to say that they have not faced any barriers.

- ↳ **Potential Recommendation:** These results suggest that working towards addressing barriers overall is certainly warranted but an even closer look into the experiences of employment equity groups is especially warranted.

One of the more important challenges with employment equity group participants is that many were not entirely comfortable indicating in this survey the type of barriers they have faced, making it quite difficult to develop solutions.

- ↳ **Potential Recommendation:** Some of the ideas proposed by respondents would suggest that training, coaching and mentoring should be provided to those identifying as a member of an employment equity group. Some of this can happen through activities like armchair discussions, which were twice as likely to be attended by members of employment equity groups compared to those who do not identify as a member of any of these groups. Part of the solution, as proposed by respondents, also lies in providing more diversity and cultural sensitivity training to managers and senior management to ensure that all levels are made aware of the importance of diversity and that strategies can be developed to foster it.

The broader findings from this study confirm that the working groups created to achieve the ENG 2025 vision are relevant. This research revealed a keen interest in career progression and development as well competency development among engineers while also revealing various perceived gaps in how the department is supporting priorities engineers have in these areas. The research also revealed that engineers would like to see some changes regarding the lateral pool and would be interested in further exploring the possibility of a post grad degree. Finally, when directly asked if the specific working groups were relevant to achieving the ENG 2025 vision, a majority of engineers felt each working group was relevant in this regard, although some working groups were more relevant than others.

- ↳ **Potential Recommendation:** Communications regarding how each working group is addressing certain challenges within the community and how each one will ultimately contribute towards providing “the tools and opportunities to enable the ENG community to attain its full potential” should continue to ensure that the community overall understands and appreciates the work being done, even if it may not have an impact on them directly.

Appendices

Appendix A – Demographics

REGION	TOTAL (n=261)	AGE	TOTAL (n=261)
Newfoundland and Labrador	0%	18-24	<1%
Nova Scotia	2%	25-34	13%
Prince Edward Island	0%	35-44	29%
New Brunswick	0%	45-54	30%
Quebec	20%	55-64	23%
Ontario	76%	65-74	2%
Manitoba	0%	75 or older	0%
Saskatchewan	0%	Prefer not to answer	2%
Alberta	2%	GENDER	TOTAL (n=261)
British Columbia	1%	Man	78%
Yukon	0%	Woman	18%
Nunavut	0%	Gender diverse	0%
Northwest Territories	0%	Other	0%
		Prefer not to answer	4%

7.1 Education Level

HIGHEST LEVEL	TOTAL (n=261)	MASTER'S DEGREE	TOTAL (n=117)
High School Diploma	0%	Aerospace/Aeronautics	10%
CEGEP	0%	Ammunition	3%
Community College	0%	Electrical	7%
Bachelor's Degree	54%	Engineering management	5%
Master's Degree	43%	Mechanical	16%
PhD	2%	MBA	9%
Other	1%	Industrial	4%
UNDERGRADUATE	TOTAL (n=259)	Chemical	3%
Aeronautical Engineering	11%	Software	3%
Chemical Engineering	7%	Systems	5%
Computer Engineering	5%	Marine/Naval	4%
Electrical Engineering	18%	Optical	3%
Materials Engineering	1%	Defence/military studies	3%

Mechanical Engineering	43%	Computer	3%
Naval Architecture	5%	Engineering	2%
Marine Engineering	<1%	Explosives	2%
Software Engineering	1%	Materials	4%
Civil	3%	Radar	2%
Industrial	2%	Project Management/Science	3%
Physics	1%	Other	20%
Management	1%	Prefer not to say	2%
Space	1%	PHD's	TOTAL (n=5)
Other	2%	Other	100%

7.2 Years of Experience

YEARS SINCE BACHELOR'S ENGINEERING DEGREE	TOTAL (n=261)	YEARS WORKED IN OTHER PRIVATE SECTOR INDUSTRY	TOTAL (n=94)
Less than 1 year	3%	Less than 1 year	5%
1 to less than 5 years	8%	1 to less than 5 years	33%
5 to less than 10 years	11%	5 to less than 10 years	24%
10 to less than 20 years	34%	10 to less than 20 years	31%
20 to less than 30 years	27%	20 to less than 30 years	1%
30+ years	16%	30+ years	1%
Don't know	1%	No response	4%
YEARS WORKED BY SECTOR	TOTAL (n=261)	YEARS WORKED IN ACADEMIA/STUDENT	TOTAL (n=67)
Public Service	97%	Less than 1 year	4%
Canadian Armed Forces (Regular and Reserve Forces)	38%	1 to less than 5 years	63%
Defence Industry	24%	5 to less than 10 years	24%
Other private sector industry (e.g. aeronautics, manufacturing, etc.)	36%	10 to less than 20 years	7%
Academia/Student	26%	20 to less than 30 years	0%
Foreign Military	5%	30+ years	0%
Other	8%	No response	1%

YEARS WORKED IN PUBLIC SERVICE	TOTAL (n=254)	YEARS WORKED IN FOREIGN MILITARY	TOTAL (n=12)
Less than 1 year	2%	Less than 1 year	33%
1 to less than 5 years	30%	1 to less than 5 years	33%
5 to less than 10 years	7%	5 to less than 10 years	17%
10 to less than 20 years	53%	10 to less than 20 years	8%
20 to less than 30 years	4%	20 to less than 30 years	8%
30+ years	3%	30+ years	0%
No response	<1%	No response	0%
YEARS WORKED IN CANADIAN ARMED FORCES	TOTAL (n=98)	YEARS WORKED IN OTHER SECTOR	TOTAL (n=21)
Less than 1 year	3%	Less than 1 year	24%
1 to less than 5 years	3%	1 to less than 5 years	33%
5 to less than 10 years	11%	5 to less than 10 years	19%
10 to less than 20 years	32%	10 to less than 20 years	5%
20 to less than 30 years	43%	20 to less than 30 years	5%
30+ years	8%	30+ years	0%
No response	0%	No response	14%
YEARS WORKED IN DEFENCE INDUSTRY	TOTAL (n=63)	SECTOR WORKED <u>JUST PRIOR</u> TO DND	TOTAL (n=261)
Less than 1 year	3%	Public Service	17%
1 to less than 5 years	32%	Canadian Armed Forces (Regular and Reserve Forces)	23%
5 to less than 10 years	32%	Defence Industry	15%
10 to less than 20 years	30%	Other private sector industry (e.g. aeronautics, manufacturing, etc.)	20%
20 to less than 30 years	3%	Academia/Student	23%
30+ years	0%	Foreign Military	<1%
No response	0%	RCMP	1%
MA&S ODP	TOTAL (n=261)	Other	1%
Yes	24%	None	<1%
No	76%	No response / Prefer not to answer	1%
No answer	<1%		

7.3 Ex-Canadian Armed Forces

YEARS SINCE RETIREMENT FROM CANADIAN ARMED FORCES	TOTAL (n=98)
Less than 1 year	6%
1 to less than 5 years	34%
5 to less than 10 years	8%
10 to less than 20 years	29%
20+ years	12%
Never served in the CAF	5%
Still serving in the CAF / Not retired	5%
No answer	1%

7.4 Engineering Domains

CURRENT ENGINEERING DOMAINS	TOTAL (n=261)	ENGINEERING DOMAINS PREVIOUSLY WORKED	TOTAL (n=261)
Material Acquisition	46%	Material Acquisition	56%
Material Support	21%	Material Support	52%
Regulatory & Technical Specialty	22%	Regulatory & Technical Specialty	42%
Both Material Acquisitions and Material Support	1%	Design	3%
Both Material Acquisitions and Regulatory & Technical Specialty	<1%	Manufacturing	2%
All of the above	1%	Software	1%
Testing & Evaluation	1%	Test & Evaluation	1%
Other	4%	Telecommunications	1%
Prefer not to answer	3%	Engineering	1%
No answer	1%	Intellectual property	1%
CURRENT DIVISION	TOTAL (n=261)	Automotive	1%
DGLEPM	30%	IT	1%
DGMEPM	21%	R&D	1%
DGAEPM	18%	Naval	1%
DGMPD (A&L)	10%	Production	1%
DGMPD Sea	8%	Project management	1%

DGMSSC	3%	Other	6%
COS (Mat)	3%	None	1%
Other	1%	Prefer not to answer	8%
Prefer not to answer	4%	No answer	1%
No answer	1%		
FUNCTIONS WITHIN MATERIAL AQUISION	TOTAL (n=120)	PREVIOUS FUNCTIONS WITHIN MATERIAL ACQUISITION	TOTAL (n=145)
Systems Engineering Management	48%	Systems Engineering Management	66%
Integrated Logistics Support Management	23%	Integrated Logistics Support Management	40%
Project management	67%	Project management	83%
Procurement (as a Technical Authority)	28%	Procurement (as a Technical Authority)	54%
Prefer not to answer	3%	Prefer not to answer	1%
FUNCTIONS WITHIN MATERIAL SUPPORT	TOTAL (n=55)	PREVIOUS FUNCTIONS WITHIN MATERIAL SUPPORT	TOTAL (n=137)
In-Service Support Management	98%	In-Service Support Management	90%
Training and Readiness Support	13%	Training and Readiness Support	13%
Prefer not to answer	0%	Prefer not to answer	9%
FUNCTIONS WITHIN REGULATORY & TECHNICAL SPECIALTY	TOTAL (n=57)	PREVIOUS FUNCTIONS WITHIN REGULATORY & TECHNICAL SPECIALTY	TOTAL (n=110)
Regulatory and Policy Stewardship	40%	Regulatory and Policy Stewardship	46%
Technical Specialty Engineering	70%	Technical Specialty Engineering	84%
Prefer not to answer	0%	Prefer not to answer	2%

7.5 ENG Level

CURRENT ENG LEVEL	TOTAL (n=261)	YEARS IN THE MATERIEL GROUP	TOTAL (n=261)
ENG-02	2%	Less than 1 year	7%
ENG-03	2%	1 to less than 5 years	25%
ENG-04	49%	5 to less than 10 years	9%
ENG-05	35%	10 less than 15 years	33%
ENG-06	7%	15+ years	25%
Prefer not to answer	4%	No answer	2%
No answer	1%	Prefer not to answer	0%
YEARS AT CURRENT LEVEL	TOTAL (n=261)	YEARS AT CURRENT POSITION	TOTAL (n=261)
Less than 1 year	13%	Less than 1 year	23%
1 to less than 5 years	46%	1 to less than 5 years	54%
5 to less than 10 years	15%	5 to less than 10 years	12%
10 less than 15 years	18%	10 less than 15 years	7%
15+ years	6%	15+ years	3%
No answer	1%	No answer	2%
Prefer not to answer	1%	Prefer not to answer	0%

7.6 Estimated Time to Retirement

RETIREMENT FROM THE PUBLIC SERVICE	TOTAL (n=261)
Less than 1 year	3%
1 to less than 5 years	9%
5 to less than 10 years	16%
10 to less than 15 years	17%
15+ years	30%
Prefer not to say	5%
Don't know	20%
No answer	2%

Appendix B – Questionnaire

ENG 2025 Community Survey

Phase 2 – Shaping the Future of the ADM(Mat) ENG Community

INFORMED CONSENT

Purpose of the Study

The objective of this research is to conduct an analysis of the professional development support offered to Materiel Group (MAT Group) engineers throughout their careers at DND. This is not the same study conducted previously on demographics of MAT Group engineers, although some demographic information is asked for statistical analysis purposes. This study will also provide vital information to the ENG 2025 Initiative to make improvements for the ENG community.

SSRRB Approval Number:

This research has been approved by the DGMPRA Social Science Research Review Board, in accordance with DAOD 5062-0 and 5062-1. The SSRRB coordination # is 1919/20F.

Participation

By continuing to the survey, you are indicating your consent to participate and your responses will be saved as you progress. You may withdraw that consent at any time by leaving the survey incomplete, which will indicate you no longer wish to have your responses used. All incomplete surveys will then be deleted from the dataset. However, if you decide you no longer wish to take part *after* the data collection has taken place, we cannot remove the information you have provided because no identifying information is being collected or stored with the survey data that would allow us separate your responses from any other participant's responses.

The survey will be 20-25 minutes in duration. The researcher(s) will keep your responses confidential and will protect your anonymity in any reports or publications.

You are not compelled to participate in this research project. If you do choose to participate you do not have to answer any questions that you do not wish to, and if you change your mind you are free to withdraw at any time from the survey without prejudice. Similarly, if you choose not to participate, this information will also be maintained in confidence.

For your input to count towards the final study results, please submit your completed survey by no later than midnight (EST) on December 20th, 2020.

Information You Provide

In regards to confidentiality, all source documentation will be kept strictly confidential and access will be restricted to the research team. The information you provide will be consolidated, in anonymous format,

in the body of the final report submitted to ADM(Mat). All analysis and reporting will be conducted at aggregate levels and at no time will any specific comments be attributed to you, nor can they be. In addition to ADM(Mat), the research findings will also be shared with the Department of National Defence.

ATIP Considerations

The *Access to Information Act* and the *Privacy Act* entitles Canadian citizens, permanent residents of Canada and individuals or corporations currently present in Canada to obtain copies of research reports and research information held in federal government files. Prior to releasing any information, the Director, Access to Information and Privacy, screens the information to ensure that the identities of individuals are not disclosed.

Questions/Concerns

If during the survey, you have any questions about the interpretation of a question, you may contact Rebecca Mardell, Chair of ENG 2025, at 613-415-6842 (Rebecca.Mardell@forces.gc.ca) or Anu Vashisht, Vice Chair of ENG 2025, at 613-220-2003 (Anu.Vashisht@forces.gc.ca).

For any technical issues with the survey, you may contact Eva Gastelum, Research Manager at Quorus, at eva@quorusconsulting.com.

Peer support and mentorship

1. In which of the following informal ways have your supervisors supported you to improve your job performance during the last year? **(SELECT ALL THAT APPLY)**

Pointing to relevant training to improve skills	1
Supporting you to improve your experience	2
Supporting you to improve your ability to contribute to the team	3
Supporting you to improve your overall performance	4
Identifying opportunities for promotion for you	5
Identifying opportunities for lateral moves to other positions	6
Other – Please specify: _____	77
Prefer not to answer	99

2. How interested are you in receiving job performance coaching from your supervisor?

Extremely interested	1
Somewhat interested	2
More or less interested	3
Not very interested	4
Not at all interested	5
Prefer not to answer	9

3. How interested are you in receiving career development coaching from your supervisor?

Extremely interested	1
Somewhat interested	2
More or less interested	3
Not very interested	4
Not at all interested	5
Prefer not to answer	9

4. How interested are you in receiving formal mentorship regarding your career development?

Extremely interested	1
Somewhat interested	2
More or less interested	3
Not very interested	4
Not at all interested	5
Prefer not to answer	9

5. Are you aware that there are formal mentorship resources available to you to help you in your career development?

- Yes, you know they exist and have used them 1
- Yes, you know they exist but have never used them 2
- No, you didn't know they existed 3

ASK IF AWARE BUT HAVE NOT USED THEM

6. What are the main reasons you have not used these formal mentorship resources? (**SELECT ALL THAT APPLY**)

- You hadn't thought about using them/No need 1
- You don't have time 2
- Other – Please specify: _____ 77
- Prefer not to answer 99

ASK IF AWARE AND HAVE USED THEM

7. To what extent have these formal mentorship resources had a positive impact on your career **in the Materiel Group**?

- Significant impact 1
- Some or little impact 2
- No impact at all 3
- Prefer not to answer 99

Professional/Career development

8. Considering the next 12 months, how much of a priority is each of the following when it comes to your professional/career development **in the Materiel Group**?

	1 Not at all a priority	2 Not much of a priority	3 Neutral	4 Somewhat of a priority	5 Very high priority	Don't know
a) Honing of technical skills						
b) Developing new technical skills						
c) Access to technical presentations						
d) Opportunities for innovation and creative thinking						
e) Short-term assignments						
f) Exchange with other governments/industry						
g) Lateral deployment pool						
h) Project management (PMCD)						
i) Government specific training						

j) Second language training						
k) Honing of leadership skills						
l) Post Graduate degree (Masters, Doctorate, Post-Doctorate)						
m) Promotions						
n) Honing of communication skills						

9. **[IF “Somewhat” or “Very Much” in Q8a or Q8b]** You indicated that **honing or developing new technical skills** is a priority for you. Which specific technical skills would be important for you to hone or develop?

OPEN-ENDED RESPONSE 77
Prefer not to answer 99

10. **[IF “Somewhat” or “Very Much” in Q8k]** You indicated that **honing your leadership skills** is a priority for you. Which specific skills would be important for you to learn or develop?

OPEN-ENDED RESPONSE 77
Prefer not to answer 99

11. **[IF “Somewhat” or “Very Much” in Q8n]** You indicated that **honing your communication skills** is a priority for you. Which specific skills would be important for you to learn or develop?

OPEN-ENDED RESPONSE 77
Prefer not to answer 99

12. How would you rate the opportunities you have to access the following resources and types of training to help you in your professional/career development **within the Materiel Group?**

	1 Poor	2 Mediocre	3 Fair	4 Very Good	5 Excellent	Don't know
a) Honing of technical skills						
b) Developing new technical skills						
c) Access to technical presentations						
d) Opportunities for innovation and creative thinking						
e) Short-term assignments						
f) Exchange with other governments/industry						
g) Lateral deployment pool						
h) Project management (PMCD)						
i) Government specific training						
j) Second language training						

k) Honing of leadership skills						
l) Post Graduate degree (Masters, Doctorate, Post-Doctorate)						
m) Promotions						
n) Honing of communication skills						

13. While working in the Materiel Group, have you joined the lateral deployment pool?

Yes 1
 No 2
 Prefer not to answer 3

14. [IF "Yes" in Q13] What would you describe as being the main benefits of having access to or using a lateral deployment pool? (SELECT ALL THAT APPLY)

Exposure to many other opportunities 1
 Exposure of my credentials to the Hiring Managers 2
 Much easier and less stressful process than the traditional competitive process 3
 Other benefit? Please specify: _____ 77
 Prefer not to answer 99

15. In what way(s), if at all, would you like to see lateral deployment pools evolve over the next 5 years?

OPEN-ENDED RESPONSE 77
 I don't see a need for any changes in this area 98
 I am not sure / Prefer not to answer 99

16. Do you consider English or French as your second language?

English 1
 French 2
 Prefer not to answer 9

17. Regarding language training, which of the following best describes your level of comfort in using English and French at work: **(SELECT ALL THAT APPLY)**

You are completely comfortable using English <u>and</u> French at work	1
You believe you could benefit from some English-language training	2
You believe you could benefit from some French-language training	3
None of the above	8
Prefer not to answer	9

18. What is your current Second Language profile?

Below BBB	1
BBB	2
Above BBB	3
You do not have a Second Language profile	4
Prefer not to answer	9

19. What types of activities do you do at work with the specific objective of improving your ability to communicate in your second language?

OPEN END	77
Nothing in particular	98
Don't know / No suggestions	99

20. What types of activities do you do on your own time (i.e. when you are not at work) with the specific objective of improving your ability to communicate in your second language?

OPEN END	77
Nothing in particular	98
Don't know / No suggestions	99

21. Which of the following Key Leadership Competencies (KLC) courses have you taken? **(SELECT ALL THAT APPLY)**

- Introduction to Treasury Board Key Leadership Competencies (instructor led training in a boardroom, offered Sep 2019 to Feb 2020) 1
- Introduction to Treasury Board Key Leadership Competencies (instructor led training by video conference, offered since June 2020) 2
- Advanced course on Treasury Board Key Leadership Competencies (offered since June 2020) 3
- [EXCLUSIVE]** You have not taken any KLC courses 8
- Prefer not to answer 9

ASK IF ANY OF THE "INTRODUCTION TO TREASURY BOARD KEY LEADERSHIP COMPETENCIES" COURSES HAS BEEN TAKEN

22. While taking the Introduction level course, how much of the Key Leadership Competencies Self-Assessment did you complete?

- None of it 1
- Some of it 2
- About half of it 3
- Most of it 4
- All of it 5
- Prefer not to answer 9

ASK IF AT LEAST ONE KLC COURSE HAS BEEN TAKEN

23. Please indicate the extent to which the content of KLC course(s) you have taken has been useful to prepare you for competitions:

ONLY SHOW COURSES TAKEN IN Q21	1 Not at all useful	2 Somewhat not useful	3 Neutral	4 Somewhat useful	5 Very useful	Prefer not to answer
a) Introduction to Treasury Board Key Leadership Competencies (instructor led training in a boardroom, offered Sep 2019 to Feb 2020)						
b) Introduction to Treasury Board Key Leadership Competencies (instructor led training by video conference, offered since June 2020)						
c) Advanced course on Treasury Board Key Leadership Competencies						

ASK IF AT LEAST ONE KLC COURSE HAS BEEN TAKEN

24. Please indicate the extent to which the content of KLC course(s) you have taken has been useful in your daily work:

ONLY SHOW COURSES TAKEN IN Q21	1 Not at all useful	2 Somewhat not useful	3 Neutral	4 Somewhat useful	5 Very useful	Prefer not to answer
a) Introduction to Treasury Board Key Leadership Competencies (instructor led training in a boardroom, offered Sep 2019 to Feb 2020)						
b) Introduction to Treasury Board Key Leadership Competencies (instructor led training by video conference, offered since June 2020)						
c) Advanced course on Treasury Board Key Leadership Competencies						

25. Do you have any suggestions to improve the KLC courses? **(SELECT ALL THAT APPLY)**

Offer more frequent courses	1
Offer more courses in French	2
Offer some sessions that only include the interview scenario portion	3
Posting practice questions	4
Do you have any other suggestions? Please specify: _____	77
Don't know / No suggestions	99

26. To what extent do you agree or disagree with the following statement: *Considering all the training opportunities available to you through DND, you believe the training lists fully cover your needs for career development.*

Strongly agree	1
Moderately agree	2
Neither agree nor disagree	3
Moderately disagree	4
Strongly disagree	5
Prefer not to answer	9

Post-grad Education Support

27. While working in the **Materiel Group**, have you considered doing a Post Graduate degree?

Yes	1
No	2
Prefer not to answer	9

28. At DND, individuals can apply for and work towards various post-grad certifications, qualifications and professional designations. If DND were to further develop post-grad programs that would allow individuals to obtain highly technical expertise in areas such as Guided Weapons, Military Radar, Ballistics, etc., how interested would you be in pursuing that form of post-grad education?

Not at all interested	1
Not very interested	2
More or less interested	3
Somewhat interested	4
Extremely interested	5
Prefer not to answer	9

29. **[ASK IF EXTREMELY OR SOMEWHAT INTERESTED IN PREVIOUS QUESTION]** What highly technical area(s) would you most want to study? **(SELECT ALL THAT APPLY)**

Artificial Intelligence	1
Robotics	2
Autonomous Systems	3
3D Printing	4
Wearable Devices	5
Nanotechnology	6
Cyber Security	7
Any other technical skill? Please specify: _____	77
Prefer not to answer	99

30. We would like to understand the conditions that would need to be met for you to consider pursuing a post-grad education opportunity while working in the Material Group. For starters, different funding options are listed below. Please select all the ones you would be prepared to accept. **(SELECT ALL THAT APPLY)**

- | | |
|--|-----------------------|
| Full time, fully funded by DND | 1 |
| Part time, fully funded by DND while working | 2 |
| Part time, partially funded by DND while working | 3 |
| If none of these funding options work for you, what scenario would:
_____ | 77 |
| I have no interest in pursuing a post-grad education opportunity | 98 SKIP TO Q32 |
| Prefer not to answer | 99 |

31. Once you graduate, would you be willing to commit to the following in exchange for the funding: working in the Materiel Group for twice the number of months or years as it took you to complete the program (e.g. if it took you 1 year to complete the program, you would commit to working in the Materiel Group for at least 2 years after you graduate)?

Please note that it does not preclude your accepting a promotion should one be offered to you.

- | | |
|----------------------|---|
| Yes | 1 |
| No | 2 |
| Prefer not to answer | 9 |

Promotion Opportunities

32. How many times have you applied to an ENG-05 / ENG-06 staffing process **in the Materiel Group**?

Once	1
Twice	2
Three times	3
More than three times – Please specify number of times: _____	4
Never	0 SKIP TO Q41
Prefer not to answer	99 SKIP TO Q41

33. How many times have you passed an ENG-05 / ENG-06 staffing process **in the Materiel Group**?

- | | | |
|---|----|--------------------|
| Never passed | 0 | SKIP TO Q35 |
| Once | 1 | |
| Twice | 2 | |
| Three times | 3 | |
| More than three times – Please specify number of times: _____ | 4 | |
| Prefer not to answer | 99 | SKIP TO Q35 |

34. How many times have you been promoted to or selected for a position through an ENG-05 / ENG-06 staffing process?

- _____ times
- | | |
|----------------------|----|
| Never | 0 |
| Prefer not to answer | 99 |

35. Typically, how many hours do you spend preparing for an ENG-05 / ENG-06 staffing process written exam?

_____ hours

36. Typically, how many hours do you spend preparing for an ENG-05 / ENG-06 staffing process interview?

_____ hours

37. **[DO NOT ASK IF “NEVER PASSED” IN Q33]** Did you pass or fail the last time you applied to the ENG-05 / ENG-06 staffing process?

- | | |
|----------------------|---|
| Passed | 1 |
| Failed | 2 |
| Prefer not to answer | 9 |

38. **[ASK IF SELECTED “Passed” IN Q37]** Why do you think that you passed the latest ENG-05 / ENG-06 staffing process to which you applied? Please give specific details regarding perhaps some of the steps you followed, the information to which you had access, how you prepared, etc.

- | | |
|--------------------------------------|----|
| OPEN-ENDED RESPONSE | 77 |
| I am not sure / Prefer not to answer | 99 |

39. [ASK IF SELECTED “Failed” IN Q37 OR “Never passed” IN Q33] Why do you think that you failed the latest ENG-05 / ENG-06 staffing process to which you applied? Please give specific details regarding factors that you feel could have improved your outcome.

OPEN-ENDED RESPONSE	77
I am not sure / Prefer not to answer	99

40. [ASK IF SELECTED “Failed” IN Q37 OR “Never passed” IN Q33] Considering the last time you failed the most recent ENG-05 / ENG-06 staffing process to which you applied, how satisfied are you with the feedback that you received during the Informal Discussion?

Not at all satisfied	1
Not very satisfied	2
More or less satisfied	3
Somewhat satisfied	4
Extremely satisfied	5
I am not sure / Prefer not to answer	99

41. How satisfied are you with the following aspects of the ENG staffing process **in the Materiel Group**:

- a) The information that is sent to you about staffing processes before the poster is released.
- b) The information that is sent to you about staffing processes once the poster is released.
- c) The information that is sent to you about staffing processes during the entire assessment process.
- d) How easy it is to obtain information about staffing processes.
- e) The frequency at which staffing processes occur.
- f) The criteria used to select individuals **in the Materiel Group** who can apply to the staffing process.
- g) The fairness of the staffing process **in the Materiel Group**.
- h) The resources and strategies at your disposal to help you prepare for the staffing process.

Not at all satisfied	1
Not very satisfied	2
More or less satisfied	3
Somewhat satisfied	4
Extremely satisfied	5
I am not sure / Prefer not to answer	99

42. What additional information, if any, would you like to receive about staffing processes? Or similarly, how would you change the type of information to which you already have access regarding staffing processes?

OPEN-ENDED RESPONSE 77
 No changes or additional information are needed 98
 I am not sure / Prefer not to answer 99

43. What additional activities would you like the ENG community to do to better prepare you for an ENG staffing process written exam and interview?

OPEN-ENDED RESPONSE 77
 Nothing else is needed to help me prepare 98
 I am not sure / Prefer not to answer 99

44. Currently, the ENG staffing process takes place every 5 years. How would you rank the following three collective staffing process approaches in terms of appeal – click and drag the option you prefer to the top of the list and then order the remaining from most appealing to least appealing.

	RANK
a) Keep current approach – renew every 5 years	
b) Processes are run every 2 years	
c) Promotions are done on a continuous basis	

45. Did you apply to the last ENG-05 staffing process?

Yes 1
 No 2 **SKIP TO Q50**
 Prefer not to answer 9 **SKIP TO Q50**

46. Please provide us your comments regarding any changes or improvements you believe could be made to **the Middle Management Situational Exercise 840 (MMSE 840)** that you completed as part of the most recent ENG-05 staffing process to which you applied. **(SELECT ALL THAT APPLY)**

No comments / No changes or improvements to suggest 1
 It was irrelevant for the process and was used simply to narrow down the applicants’ pool 2
 The allocated time was too short 3
 There was no guidance on how to prepare for this test 4
 There was no feedback after the test so I don’t know what I did right or wrong 5
 Any other changes or improvements? Please specify: _____ 77
 I am not sure / Prefer not to answer 99

47. Please provide us your comments regarding any changes or improvements you believe could be made to **the written exam** you wrote as part of the most recent ENG-05 staffing process to which you applied.

OPEN-ENDED RESPONSE	77
No comments / No changes or improvements to suggest	98
I am not sure / Prefer not to answer	99

48. Please provide us your comments regarding any changes or improvements you believe could be made to **the interview** in which you participated as part of the most recent ENG-05 staffing process to which you applied.

OPEN-ENDED RESPONSE	77
No comments / No changes or improvements to suggest	98
I am not sure / Prefer not to answer	99

49. What additional changes, if any, would you recommend to the methods used to assess candidates for future staffing processes? Your suggestions could include changes to the current methods used or suggestions for new approaches that could be considered.

OPEN-ENDED RESPONSE	77
No other forms of assessment should be added	98
I am not sure / Prefer not to answer	99

50. Did you join ADM(Mat) as a civilian ENG in the past 2 years? **(SELECT ALL THAT APPLY)**

Yes	1	
No	2	SKIP TO Q52

51. The following is a list of topics that will be covered as part of a new staff member's onboarding process. Considering the last time you went through an onboarding process, how important are each of these topics?

- a) **ENG work activities:** Description of Engineering Domains, Competency Functions and Standard Job Descriptions
- b) **Career development:** Description of career progression opportunities such as seeking Project Management Competency Development (PMCD) certification, applying for Certificate in Complex Project and Procurement Leadership (CPPL), mentoring opportunities, Officer Development Program (ODP) and Lateral Progression Program for ENGs.
- c) **Personal development:** Information on resources available to improve communication skills, leadership skills and second language skills.
- d) **Training:** Information on training resources available to ENGs on a variety of topics such as technical, project management, information management and HR management.

- e) **ENG staffing processes:** Information on various staffing vehicles used to staff ENG positions such as advertised or non-advertised processes and the collective staffing process.
- f) **ENG community management:** Information on the mission and structure of the ENG Community management team, roles of ENG Champion, ENG Advisory Committee, ENG 2025 initiative team and its various ongoing activities.
- g) **Professional Institute of Public Service of Canada (PIPSC) information:** Roles and responsibilities of the ENGs union PIPSC, its Engineers and Architects Group (NR Group), NR DND Sub-Group and information on NR Group's Collective Agreement.

Not at all important	1
Not very important	2
More or less important	3
Important	4
Extremely important	5
I am not sure / Prefer not to answer	9

Equity, Diversity and Inclusion

52. Let's turn our attention to barriers you may face in the workplace. When it comes to pursuing the career path you want to pursue **in the Materiel Group**, what barriers, if any, do you feel you have faced or experienced?

OPEN-ENDED RESPONSE	77
None / No barriers have been faced	98
I am not sure / Prefer not to answer	99

53. One of the areas of focus for ENG 2025 is employment equity. The Employment Equity Act specifically refers to four employment equity groups. In which of the following groups, if applicable, do you identify? **(SELECT ALL THAT APPLY)**

Indigenous Peoples	1
Member of a visible minority group	2
Person with a disability	3
Woman	4
I do not belong to any of these groups	7
I am a member of at least one of these groups but prefer not to indicate which one(s)	8
Prefer not to answer	9

[ASK IF Q53 = 8]

54. Would you like to share why you have decided not to self-identify?	
OPEN-ENDED RESPONSE	77
Prefer not to answer	99

[ASK IF BARRIERS ARE FACED IN Q52 AND SELF-IDENTIFIES IN AT LEAST ONE GROUP IN Q53 (Q53=1,2,3,4 or 8)]

55. Individuals face barriers for a variety of reasons. Which barriers, if any, do you believe you have experienced because of your identity?	
OPEN-ENDED RESPONSE	77
No barriers have been faced because of my identity	98
I am not sure / Prefer not to answer	99

[ASK IF Q53=1,2,3,4 or 8]

56. What programs should be instituted to help people overcome barriers experienced because of how they self-identify?	
OPEN-ENDED RESPONSE	77
I am not sure / Prefer not to answer	99

57. Did you participate in the armchair discussions related to employment equity?	
Yes	1
No	2

58. If DND were to hold more armchair discussions in the future, what topics would you like to see covered?	
OPEN-ENDED RESPONSE	77
I am not sure / Prefer not to answer	99

59. What training topics come to mind that you believe would help individuals in the Materiel Group at large better understand the needs of certain groups who tend to face barriers because of how they self-identify, including Employment Equity Groups (Women, Visible Minorities, Persons with Disabilities and Aboriginal Peoples)?	
OPEN-ENDED RESPONSE	77
I am not sure / Prefer not to answer	99

Community Management

60. We would now like to get your feedback on the role of the ENG Champion and on the purpose of the ENG Advisory Committee.

The **ENG Champion** guides the Materiel Group in establishing and maintaining a professional and agile ENG community so that it contributes to the Mat Group in delivering the materiel and services required by the CAF. The ENG Champion is responsible for contributing departmental expertise and insight to the development of engineer workforce initiatives. The ENG Champion chairs the ENG Advisory Committee (AC).

The **ENG AC** performs two primary functions. First, it provides advice, recommendations, and council to the ENG Champion. Second, it is the primary vehicle for the ENG Champion to engage the divisions in contributing to the ENG community initiatives.

Based on various communications you may have received regarding the ENG Champion and the ENG AC, to what extent do you agree or disagree with the following statements?

The role of the ENG Champion and purpose of the ENG Advisory Committee are...	1 Strongly disagree	2 Moderately disagree	3 Neither agree nor disagree	4 Moderately agree	5 Strongly agree	Don't know
a) Meaningful to you						
b) Clear to you						
c) Headed in the right direction						
d) Focused on the right things						

61. As you may or may not know, the vision of the ENG 2025 and its Working Groups is *“To Provide the tools and opportunities to enable the ENG community to attain its full potential”*. A working group has been created to address very specific areas, as shown in the list below. How would you rate the relevance of each of the ENG 2025 Working Groups when it comes to achieving the initiative’s vision?

	1 Not at all relevant	2 Not very relevant	3 More or less relevant	4 Relevant	5 Extremely relevant	Don't know
a) Career Progression and Development						
b) Officer Development Program (ODP) Issues and Development						
c) Lateral Progression Programs and Processes						
d) Employment Equity						
e) ENG Competency Development						
f) Professional Qualifications and Certifications						

62. Do you believe that an additional working group should be created to further improve ENG 2025’s ability to achieve its vision? And if so, please indicate the key issue, theme or area on which this new working group should focus.

OPEN-ENDED RESPONSE 77
 No other working groups are needed 98
 I am not sure / Prefer not to answer 99

63. As you may know, there are two ENG Forums organized on a yearly basis: a fall community forum, and a spring technical forum. To what extent are each of these forums important to you?

	1 Not at all important	2 Not very important	3 More or less important	4 Important	5 Extremely important	Don't know
a) Fall Community Forum						
b) Spring Technical Forum						

64. Based on how you value these types of forums, which of the following scenarios do you prefer?
SELECT ALL THAT APPLY

The current approach of 2 forums per year is ideal – spring and fall forums 1
 Keep the Fall Community Forum and remove or replace the Spring Forum 2
 Keep the Spring Technical Forum and remove or replace the Fall Forum 3
 Add a new forum, which would focus on the following theme: _____ 77
 I am indifferent 98

65. What is your preferred way to receive information from the ENG community?

OPEN-ENDED RESPONSE 77
 I am not sure / Prefer not to answer 99

Demographics

The last few questions are strictly for statistical analysis purposes. All of your answers remain completely confidential.

66. In which province or territory do you live?

Newfoundland and Labrador	1
Nova Scotia	2
Prince Edward Island	3
New Brunswick	4
Quebec	5
Ontario	6
Manitoba	7
Saskatchewan	8
Alberta	9
British Columbia	10
Yukon	11
Nunavut	12
Northwest Territories	13

67. Please indicate in which of the following age categories you belong:

18 - 24	1
25 - 34	2
35 - 44	3
45 - 54	4
55 - 64	5
65 - 74	6
75 or older	7
Prefer not to answer	9

68. **[DO NOT ASK IF Q53 = 4]** What is your gender?

Man	1
Woman	2
Gender diverse	3
Other – please specify: _____	77
Prefer not to answer	99

Education level

69. What is your highest level of education? **(SELECT ONE)**

- High School Diploma 1
- CEGEP 2
- Community College 3
- Bachelor's Degree 4
- Master's Degree 5
- PhD 6
- Other – Please specify: _____ 77

[ASK IF Q69 = 4,5,6]

70. In which program/discipline did you complete your undergraduate degree? **(SELECT ONE)**

- Aeronautical Engineering 1
- Chemical Engineering 2
- Computer Engineering 3
- Electrical Engineering 4
- Materials Engineering 5
- Mechanical Engineering 6
- Naval Architecture 7
- Marine Engineering 8
- Software Engineering 9
- Other – Please specify: _____ 77

[ASK IF Q69 = 5 or 6]

71. In what field(s) did you earn your Master's degree(s)?

Please specify _____ 77

[ASK IF Q69 = 6]

72. In what field(s) did you earn your PhD('s)?

Please specify _____ 77

Years of Experience

73. For how many years since achieving your Bachelor's engineering degree have you practiced as an engineer? Please only include the years where at least 50% of your time was spent doing engineering related work.

- Less than 1 year 0
- _____ years

74. Please indicate the number of years you have worked in each of the following sectors since the start of your career (after graduation with a Bachelor's degree, if applicable). If for any given sector you worked for less than a year, please enter a decimal value (where 0.5=half a year).

NOTE: Half year increments are only needed if you worked for less than a year. For all other cases, round up or down to the nearest year. If you did not work in a given sector, leave the cell blank or enter a zero.

	<u>Years</u>
Public Service	_____
Canadian Armed Forces (Regular and Reserve Forces)	_____
Defence Industry	_____
Other private sector industry (e.g. aeronautics, manufacturing, etc.)	_____
Academia/Student	_____
Foreign Military	_____
Other sector – Please specify: _____	_____

75. In which sector were you working just prior to joining DND? **(SELECT ONLY ONE)**

Public Service	1
Canadian Armed Forces	2
Defence Industry	3
Other Industry	4
Academia/Student	5
Foreign Military	6
Other sector – Please specify: _____	77

76. When you joined the Materiel Group, were you sponsored through the Materiel Acquisition & Support – Officer Development Program (MA&S ODP)?

Yes	1
No	2

Ex-Canadian Armed Forces

77. **[ASK IF WORKED IN CAF IN Q74]** How many years have you been retired from the Canadian Armed Forces (CAF), including both Regular and Reserve Forces?

Less than 1 year	0
_____ years	
I never served in the CAF	98
I am still serving in the CAF / Not retired	99

Engineering Domains

78. In which of the following engineering domains do you currently work? Hover your mouse over the domain to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS] (SELECT ONE)**

Materiel Acquisition ³	1
Materiel Support ⁴	2
Regulatory & Technical Specialty ⁵	3
Other – Please specify: _____	77
Prefer not to answer	99

79a. **[ASK IF Q78 = 1]** In which of the following functions do you currently work within Material Acquisition? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS] (SELECT ALL THAT APPLY)**

Systems Engineering Management ⁶	1
Integrated Logistics Support Management ⁷	2
Project management ⁸	3
Procurement (as a Technical Authority) ⁹	4
Prefer not to answer	9

³ **Materiel Acquisition:** Materiel Acquisition is the conduct of acquiring the materiel component of a defence capability. This domain includes engineering roles and functions in systems engineering, integrated logistics support, project management, and procurement, for introduction of materiel into service. Such key functions may include technical requirements development, technical bid evaluation, test and evaluation, training and support development, project control, and risk management.

⁴ **Materiel Support:** Materiel Support is the conduct of support, maintenance and disposal of in-service materiel assets. This domain requires the application of engineering theory and principles to ensure the availability, reliability, maintainability and performance of the materiel. Key activities may include planning, executing and managing sustainment and disposal initiatives, support contracts, technical investigations, and technical publications.

⁵ **Regulatory & Technical Specialty:** Regulatory & Technical Specialties provide specialist support and technical expertise in a particular field or subset of engineering that include, but are not limited to, policy and regulatory engineering, development or research engineering, test and evaluation, technical investigation and software or enterprise architecture of information system.

⁶ The **Systems Engineering Management** competency function oversees the system engineering activities for the acquisition of military equipment/capability from requirements definition, to option analysis, to systems verification and validation, including Test & Evaluation (T&E). This function requires knowledge of departmental strategic direction in relation to the new equipment and the key activities that support it.

⁷ The **Integrated Logistics Support Management** competency function within Materiel Acquisition domain oversees the support planning and integration activities for the introduction of a new military equipment/ system or capability into the Canadian Armed Forces.

⁸ The **Project Management** competency function oversees the application of sound and best practices and procedures for the planning and execution of project. This competency function requires the skills in and intimate knowledge of project management best practices and procedures government policy on project management; Project Complexity & Risk Assessment (PCRA), project approval process; expenditure authority; integrated team, industry benefits. Business acumen and system thinking. Negotiation Skills and Stakeholder management.

⁹ The **Procurement (as Technical Authority)** competency function oversees the overall execution of the procurement activities within the specified timeline and the allocated resources until the successful completion of the project (delivery of work on time and on budget). This competency function requires the knowledge of and skills in procurement strategy, government procurement process and authority, including project approval and expenditure authority (as specified in the Procurement Administration Manual) as well as elements of the Financial Administrative Act.

79b. **[ASK IF Q78 = 2]** In which of the following functions do you currently work within Material Support? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS]** (SELECT ALL THAT APPLY)

In-Service Support Management ¹⁰	1
Training and Readiness Support ¹¹	2
Prefer not to answer	9

79c. **[ASK IF Q78 = 3]** In which of the following functions do you currently work within Regulatory and Technical Specialty? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS]** (SELECT ALL THAT APPLY)

Regulatory and Policy Stewardship ¹²	1
Technical Specialty Engineering ¹³	2
Prefer not to answer	9

80. In which of the other engineering domains have you previously worked over the course of your career as an engineer? Hover your mouse over the domain to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS]** (SELECT ALL THAT APPLY)

Materiel Acquisition ¹⁴	1
Materiel Support ¹⁵	2
Regulatory & Technical Specialty ¹⁶	3
Other – Please specify: _____	77
Prefer not to answer	99

¹⁰ The **In-Service Support Management** competency function oversees the fleet / system performance to ensure the original design and performance intent is being maintained across the total fleet or complete system. This competency function requires the skills in or knowledge of on-going execution and monitoring of in-service support engineering.

¹¹ The **Training & Readiness Support** competency function oversees the execution and adjustment of training support, materiel and procedures. This competency function requires a number of skills in and knowledge of training publications, training verification and validation and equipment readiness management.

¹² The **Regulatory and Policy Stewardship** competency function oversees the development and compliance of government policies and regulations related to engineering. The competency function requires the skills in and knowledge of government policy framework, interpretation of regulatory requirements and understanding the implications as a result of application of engineering principles and theories for the execution of these. Note that the audit function resides with an authority whose organization is outside of Materiel Group.

¹³ The **Technical Specialty Engineering** competency function carries out the specific engineering activities, including Research and Development (R&D), Test and Evaluation (T&E), and Quality Assurance for the certain engineering disciplines such as structural integrity, software coding and testing, etc.

¹⁴ **Materiel Acquisition:** Materiel Acquisition is the conduct of acquiring the materiel component of a defence capability. This domain includes engineering roles and functions in systems engineering, integrated logistics support, project management, and procurement, for introduction of materiel into service. Such key functions may include technical requirements development, technical bid evaluation, test and evaluation, training and support development, project control, and risk management.

¹⁵ **Materiel Support:** Materiel Support is the conduct of support, maintenance and disposal of in-service materiel assets. This domain requires the application of engineering theory and principles to ensure the availability, reliability, maintainability and performance of the materiel. Key activities may include planning, executing and managing sustainment and disposal initiatives, support contracts, technical investigations, and technical publications.

¹⁶ **Regulatory & Technical Specialty:** Regulatory & Technical Specialties provide specialist support and technical expertise in a particular field or subset of engineering that include, but are not limited to, policy and regulatory engineering, development or research engineering, test and evaluation, technical investigation and software or enterprise architecture of information system.

81a. **[ASK IF Q80 = 1]** In which of the following functions have you previously worked within Material Acquisition? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS] (SELECT ALL THAT APPLY)**

Systems Engineering Management ¹⁷	1
Integrated Logistics Support Management ¹⁸	2
Project management ¹⁹	3
Procurement (as a Technical Authority) ²⁰	4
Prefer not to answer	9

81b. **[ASK IF Q80 = 2]** In which of the following functions have you previously worked within Material Support? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS] (SELECT ALL THAT APPLY)**

In-Service Support Management ²¹	1
Training and Readiness Support ²²	2
Prefer not to answer	9

81c. **[ASK IF Q80 = 3]** In which of the following functions have you previously worked within Regulatory and Technical Specialty? Hover your mouse over the function to obtain a definition. **[DEFINITIONS TO BE PROVIDED AS MOUSE-OVER OPTIONS] (SELECT ALL THAT APPLY)**

Regulatory and Policy Stewardship ²³	1
Technical Specialty Engineering ²⁴	2
Prefer not to answer	9

¹⁷ The **Systems Engineering Management** competency function oversees the system engineering activities for the acquisition of military equipment/capability from requirements definition, to option analysis, to systems verification and validation, including Test & Evaluation (T&E). This function requires knowledge of departmental strategic direction in relation to the new equipment and the key activities that support it.

¹⁸ The **Integrated Logistics Support Management** competency function within Materiel Acquisition domain oversees the support planning and integration activities for the introduction of a new military equipment/ system or capability into the Canadian Armed Forces.

¹⁹ The **Project Management** competency function oversees the application of sound and best practices and procedures for the planning and execution of project. This competency function requires the skills in and intimate knowledge of project management best practices and procedures government policy on project management; Project Complexity & Risk Assessment (PCRA), project approval process; expenditure authority; integrated team, industry benefits. Business acumen and system thinking. Negotiation Skills and Stakeholder management.

²⁰ The **Procurement (as Technical Authority)** competency function oversees the overall execution of the procurement activities within the specified timeline and the allocated resources until the successful completion of the project (delivery of work on time and on budget). This competency function requires the knowledge of and skills in procurement strategy, government procurement process and authority, including project approval and expenditure authority (as specified in the Procurement Administration Manual) as well as elements of the Financial Administrative Act.

²¹ The **In-Service Support Management** competency function oversees the fleet / system performance to ensure the original design and performance intent is being maintained across the total fleet or complete system. This competency function requires the skills in or knowledge of on-going execution and monitoring of in-service support engineering.

²² The **Training & Readiness Support** competency function oversees the execution and adjustment of training support, materiel and procedures. This competency function requires a number of skills in and knowledge of training publications, training verification and validation and equipment readiness management.

²³ The **Regulatory and Policy Stewardship** competency function oversees the development and compliance of government policies and regulations related to engineering. The competency function requires the skills in and knowledge of government policy framework, interpretation of regulatory requirements and understanding the implications as a result of application of engineering principles and theories for the execution of these. Note that the audit function resides with an authority whose organization is outside of Materiel Group.

²⁴ The **Technical Specialty Engineering** competency function carries out the specific engineering activities, including Research and Development (R&D), Test and Evaluation (T&E), and Quality Assurance for the certain engineering disciplines such as structural integrity, software coding and testing, etc.

82. In which Division do you currently work? **(SELECT ONE)**

- | | |
|-------------------------------|----|
| DGLEPM | 1 |
| DGMEPM | 2 |
| DGAEPM | 3 |
| DGMPD (A&L) | 4 |
| DGMPD Sea | 5 |
| DGMSSC | 6 |
| COS (Mat) | 7 |
| Other – Please specify: _____ | 77 |
| Prefer not to answer | 99 |

ENG Level

83. What is your current ENG level? **(SELECT ONE)**

- | | |
|----------------------|---|
| ENG-02 | 1 |
| ENG-03 | 2 |
| ENG-04 | 3 |
| ENG-05 | 4 |
| ENG-06 | 5 |
| Prefer not to answer | 9 |

84. How many years have you been at your current level?

- | | |
|------------------|---|
| Less than 1 year | 0 |
| _____ years | |

85. How many years have you been **in the Materiel Group**?

- | | |
|------------------|---|
| Less than 1 year | 0 |
| _____ years | |

86. How many years have you been in your current position?

- | | |
|------------------|---|
| Less than 1 year | 0 |
| _____ years | |

Estimated Time to Retirement

87. When do you plan on retiring from the public service? Please provide a rough estimate to the best of your knowledge.

- | | |
|-------------------|----|
| Less than 1 year | 0 |
| In _____ years | |
| Prefer not to say | 98 |
| Don't know | 99 |

Thank you for completing this survey. We appreciate your feedback and look forward to providing you more updates regarding ENG 2025 and its various initiatives.